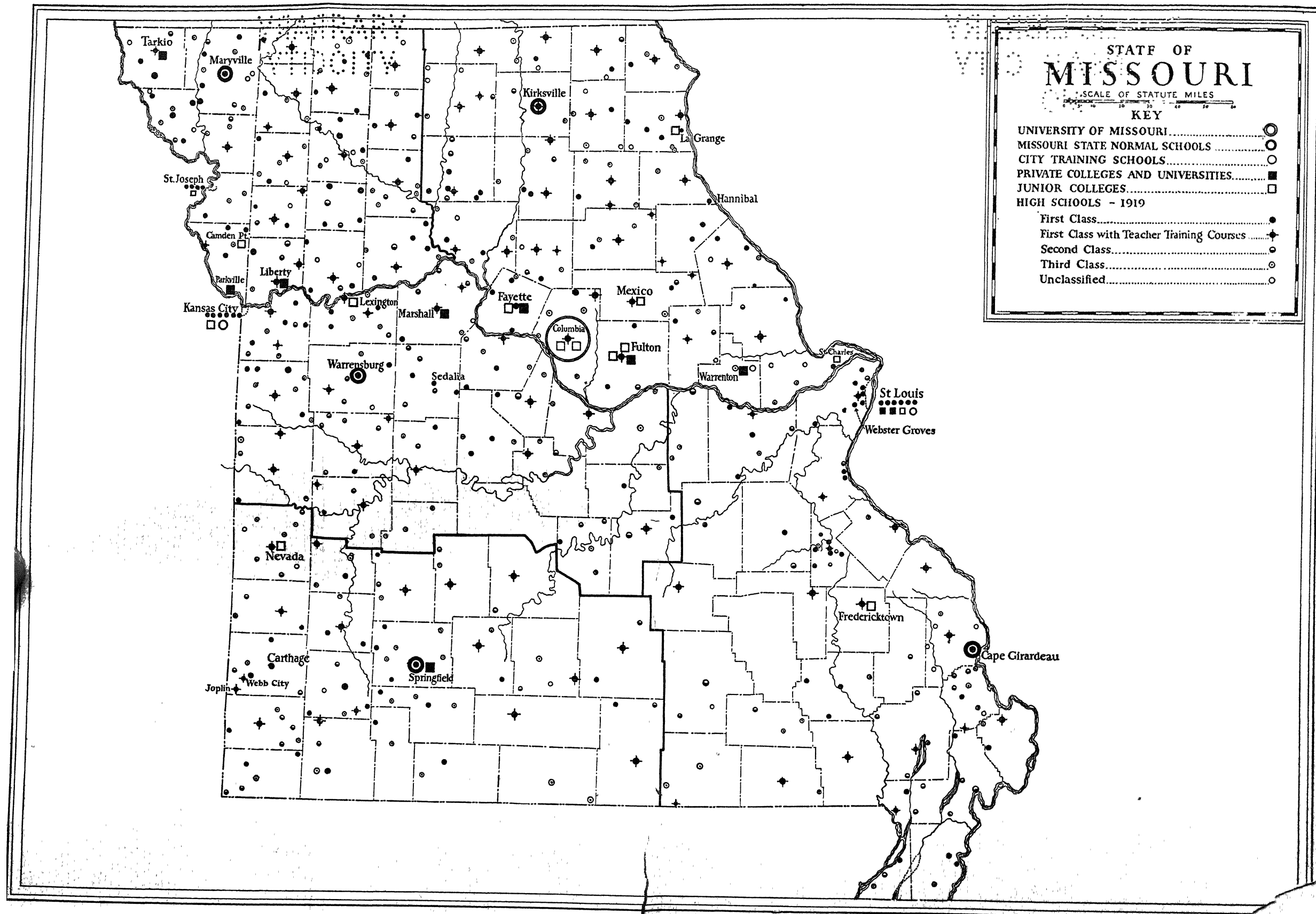


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THE PROFESSIONAL PREPARATION OF TEACHERS FOR AMERICAN PUBLIC SCHOOLS

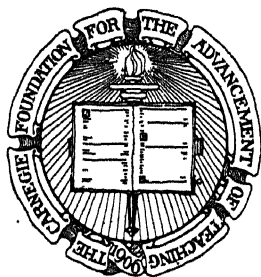
A STUDY BASED UPON AN EXAMINATION OF TAX-SUPPORTED
NORMAL SCHOOLS IN THE STATE OF MISSOURI

By

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PREFACE

THIS Study of the Preparation of Teachers for the Public Schools originated in an official request made to the Carnegie Foundation by the Governor of Missouri in July, 1914. Governor Major defined the problem of the state with respect to its teachers in the following words:

"One of the chief problems confronting this and other states is a wholesome supply of adequately-trained and prepared teachers. In this matter Missouri has made great progress during the last eighteen months. We have a great university and five splendid normal schools, and teachers' training courses in about 75 high schools. The question, however, is ever open as to what is the best preparation and what is the duty of the State in meeting it, and how can the State secure the greatest benefit at a minimum expense."

The enquiry undertaken by the Carnegie Foundation with the coöperation of many students of education began with an examination of the agencies for the training of teachers in the State of Missouri as thus enumerated. A study of these agencies, however, inevitably disclosed a more far-reaching problem, and led to an attempt to evaluate the process itself whereby teachers are prepared, and to an effort to formulate trustworthy principles of procedure. This development of the scope of the enquiry has modified the undertaking in certain important particulars: first, attention has been concentrated on the normal schools, inasmuch as they represent the professional problem of teacher-training in its simplest form; second, instead of a report addressed only to legislators and to lay readers generally, the study has come to include a somewhat technical discussion of the fundamental considerations that enter into the organization and conduct of the courses of study intended for teacher-training; and third, instead of a short bulletin, there has necessarily resulted a volume sufficiently large to admit of the treatment of these professional topics. Throughout the report there is woven a discussion of the statutory and administrative conditions in the Missouri institutions for the training of teachers; and the general treatment has been greatly illuminated by an intensive study of the elements of the Missouri teaching population with which the problem of teacher-training is most concerned.

While the present report, therefore, is confined to a discussion of the normal school and its function, its curriculum, and its capabilities for the preparation of teachers for the different grades of schools, it will necessarily be supplemented by a second report, dealing with an examination of teacher preparation in colleges and universities. This could scarcely be based upon the study of a single institution in one state.

In the Introduction to the report, not only is the evolution of the study made clear, but also detailed reference is made to the teachers and writers on education who have participated in its preparation. This includes many representatives of normal schools, colleges, and universities, men whose opinions have been formed upon actual experience as well as upon long study of the problem. The result which is here laid

before students of education is, therefore, the outcome of the coördinated effort of a considerable body of skilled professional men.

Outside of the information contained in the Introduction, certain aspects of the report may be mentioned from the standpoint of the Carnegie Foundation itself.

The various bulletins dealing with educational subjects that have been issued by the Carnegie Foundation in the last dozen years may be grouped in two classes. To the first class belong bulletins of a professional character addressed to members of the profession concerned. Such was the bulletin printed in 1910 on Medical Education in the United States and Canada, which was addressed immediately to teachers and practitioners of medicine. In the second group of bulletins are included those which are aimed to state in simple and clear form educational questions and results generally known to professional men, but whose knowledge is not widespread outside of the profession itself. Such a bulletin is that just issued entitled "Justice and the Poor," which seeks to convey to the intelligent layman a clear statement of the causes thru which a denial of justice to the poor has oftentimes resulted not by any intention of the law, but because the administration of the law has not kept up with its intent.

The present report belongs to the first group of bulletins. It is addressed to the men and women who are working in a distinct professional field, namely, that of teaching—a much larger field than that of medicine. No teacher in the elementary or secondary or normal schools, or in the school of education of a college or university, can fail to be interested in the effort to do what has been attempted in this report. It represents the first comprehensive formulation of good practice in the largest field of professional training for public service in our country, and it is believed that the work has been done with such care that the results here set forth are worthy of the thoughtful study of every earnest and intelligent teacher.

It will be evident to the reader that this exceedingly important task has had a most sympathetic handling even tho the treatment has necessarily been critical in method. In spite of widely differing training and experience, the authors have been singularly unanimous in their conclusions. Aside from the inevitable peculiarity of their individual points of view, their examination of the situation has been as completely unbiased and disinterested as it was possible to make it. Their commission from the Foundation centred in a true statement and a reasonable interpretation of the facts, however familiar or however novel the results; and their conclusions indicate this. For example, as urged in the earlier reports of the Foundation, there appears here to be no reason why tax-supported normal schools should not give themselves unreservedly to the great business of properly preparing teachers. On the other hand, the contention between normal school and college as to which shall prepare high school teachers—a dispute that previously seemed important—now appears superficial. The Carnegie Foundation has had no preconceived theory to promulgate. It has, indeed, never committed itself to any pronouncement concerning normal schools beyond the mere assumption that it is the duty of the normal school to train teachers.

This report makes clear that what is really needed is not arbitrary distinctions as between normal schools and colleges, but an enlightened administration of the state's entire teacher-training function exercised from a single directing body equipped to prepare teachers for all schools as thoroughly as possible. No man or woman faces a harder task than that which confronts the untrained teacher who essays to teach others that which he has himself never learned. Nothing goes so far to reduce a profession to the level of the commonplace as the lack of a background of knowledge and of professional spirit in its members.

To-day in the elementary schools of the nation, and particularly in the rural schools, the American woman is carrying the heavy load of public school teaching. In every state of the Union young women are teaching whose formal education never went beyond one year of high school, who receive little assistance or encouragement from the school authorities, and yet who, out of native ability and enthusiasm, thru hard work and the saving grace of a wholesome sense of proportion, become true teachers. Seldom does a community give credit to the brave womanly figure that carries on its slender shoulders so heavy a responsibility. But it is idle with the restricted preparation, the lack of sympathetic counsel, and the scant pay that are the characteristics of elementary school teaching to-day, to expect such heroic service except in a limited number of cases. The aim of each state should be to work toward a situation where the teacher in the elementary and secondary schools shall possess a training that is adequate and a professional recognition that will attract and satisfy the aspirations and the economic needs of able men and women. To open the door to a finer preparation for the life of a teacher and to put this profession on a plane of the highest honor and dignity is fundamental to any true progress in education for our country.

To attain this is only in part a matter of cost and of the teacher's salary. One cannot go out in the market with any sum of money, however large, and buy good teaching. An adequate army of sincere, able, and thoughtful teachers can be recruited only from a people who discriminate between that which is sincere and that which is superficial and insincere. Education in a democracy, to serve its real purpose, must be an education of the whole people. The school reacts on the body politic and the ideals of the democracy react on the school. An honest and thorough system of public schools, manned by able and well-trained teachers, can only arise among a people who themselves believe in honesty and thoroughness.

It must be confessed that the most striking weakness of American political, social, and economic thinking lies in the superficial character of our education. In our public schools, and no less in our universities and colleges, education is interpreted only too often to mean a smattering of knowledge in many things; seldom is it construed in terms of mastery of any one subject or as the ability to think clearly. Our schools reflect the almost universal superficiality of our people, and our citizenship is educated to the ideal of superficiality in our schools. There is no end to these mutual

reactions except an aroused public opinion that will demand sincere teaching and a body of teachers who will educate the children of the nation to the ideals of simplicity, sincerity, and thoroughness. An honest system of education and a clear-thinking public opinion must be developed together. This is the fundamental problem of a democracy.

Finally, one cannot forget that since this report was undertaken the whole problem of education in our country, as in all countries, has received a new emphasis, and has been subjected to a new scrutiny. The letter of the Governor of Missouri, out of which this study arose, was dated July 18, 1914. Two weeks later Europe had entered upon the great war which was later to involve the United States as well. This report appears after the actual armed conflict has ceased, but at the very moment when our country is face to face with the necessity of evaluating anew its system of education. Economic no less than social conditions are upon a new basis. Within the last year and a half the value of the teacher's salary—often more properly called wages—has been cut in half by the rise in the cost of living. Along with the demand of the moment for an improved and inspiring system of public schools, we are confronted with a situation in which the best teachers are rapidly withdrawing from the profession. The country faces a real crisis in its educational development, and the passing of that crisis depends mainly on the possibility of training and bringing into the schools teachers fitted for their high task. The whole problem of the service of the schools themselves hangs absolutely upon the ability to obtain the requisite supply of devoted, able, and well-prepared teachers.

In such a situation there is need for preserving a true perspective. The American people do not intend that the schools shall be made the victims of any sudden disturbance. The public, when it understands the situation, will be ready to pay the price for good teachers, but it should also be clearly apprehended that a mere raise of pay of the future public school teachers, whether in the rural schools or in the city schools, is but a partial solution of the problem. The teacher must have before him a career that will attract the high-minded and ambitious student. He must be able to earn in that career a living salary and one that will provide for his comfort and for his protection in old age, but that is only one of the conditions to be fulfilled. Before all else we must have in our minds a clear knowledge of what good teaching is, of the methods by which teachers may be fitted for their calling, and under what supervision and organization the schools shall be conducted in order that the intellectual, social, and spiritual aspirations of teachers may be realized for the common good.

Above and beyond all considerations of salary, it is necessary to have among teachers the spirit which rises out of professional training—adequate, scholarly, devoted—and which will make all who breathe its atmosphere proud to belong to a profession where such qualifications are widespread and recognized features. Without such a condition, no mere horizontal raise of salary will transform our schools into places of true instruction for children and for youth.

It is the purpose of this report to point the way not only to better financial recognition of the teacher's service and to make clear to the public its duties in this respect, but still more to emphasize the need for that professional conception of ability, of knowledge, and of preparation which must characterize the teachers' equipment before the schools can become the effective agency in civilization which they aim to be.

HENRY S. PRITCHETT.

January, 1920.

THE PROFESSIONAL PREPARATION OF TEACHERS
FOR AMERICAN PUBLIC SCHOOLS

I

INTRODUCTION

A. CHARACTER AND CIRCUMSTANCES OF THE ENQUIRY

THE present Bulletin, the fourteenth in the Foundation's series of educational publications, contains the first section of a study begun more than five years ago. In July, 1914, the Carnegie Foundation received from the Governor of the State of Missouri, Elliott W. Major, an invitation to consider the problem of the "supply of adequately trained and prepared teachers" in that state, with reference especially to the question, "What is the best preparation and what is the duty of the state in meeting it, and how can the state secure the greatest benefit at a minimum expense?"

The proposal for an examination into the preparation of teachers for American public schools had received serious consideration at various times since the educational studies of the Foundation were first undertaken. The problem was found to differ materially from that of legal or medical education, in that the preparation of teachers involves much larger numbers, is much more local in character, and depends more directly on state authority for its management. The conclusion had at length been reached that the only satisfactory treatment of the problem at present would be one that approached it as primarily a state enterprise.

The invitation from Missouri was therefore accepted by the Foundation, and the enquiry was formally inaugurated at a conference held at Jefferson City, Missouri, on November 28, 1914. Here, at the Governor's request, the President of the Foundation met about one hundred of the leading workers in the schools, normal schools, and colleges of the state, and discussed with them the proposed study, receiving, at the close of the conference, their unanimous endorsement and pledge of coöperation in the undertaking.

The enquiry was projected in two main divisions. The first was to consist of a careful examination of all the various institutions in the state engaged in preparing teachers for the public schools. The report which follows embodies a part of the results of this phase of the work as explained more fully below. The second division contemplated a census of the teachers of the state. It was proposed to make this as nearly complete as possible in order to determine the actual characteristics of the teaching population with reference to its training, and to secure data from which effectively to analyze the problem of teacher supply. The response to this endeavor was highly satisfactory; and data were secured from more than four-fifths of the twenty thousand teachers in the public schools. The results have been studied with care, and will be published in detail in a separate bulletin having as its central topic the relations between a state, as represented in its official department of education, and the entire body of teachers in its service.

It was at first expected that the institutional study could be presented as a whole in a single volume, but it soon became evident that a sectional treatment would be

necessary if justice were to be done even to a few selected aspects of the subject. Thus the first question suggested in the Governor's invitation, "What is the best preparation?" immediately assumed formidable dimensions, and an attempt was made quite independent of the Missouri study to formulate a theory of the preparation of teachers, together with concrete applications in terms of specific curricula, that would be acceptable to the leading students in that field all over the country. This set of theses and provisional curricula was issued early in 1917, and elicited an extraordinary amount of valuable comment and criticism from representative sources—material which is now being worked over for a revised edition of these proposals.

In like manner a consideration of the problems found to be uppermost in the normal schools on the one hand and in the universities and colleges on the other, suggested that separate treatment was advisable, altho fundamentally the two sets of institutions have much in common and, judging by present indications, are rapidly approaching an identical conception of their task in so far as the preparation of teachers is concerned. Consequently the efforts of the college and university to provide professional training in education have been postponed for later consideration, and the present discussion is concerned solely with the state and city normal schools; except as the questions of government and control, curriculum organization, and some others, necessarily involve all state institutions engaged in this work.

Even with this restriction it was found to be impossible to include within reasonable limits an examination of all features, or even of all important features, of normal school activity. To many it will appear difficult to justify the omission of any reference to housing or material equipment. Still more would probably regard a study of normal school financing, here omitted, as of greater importance than many topics that have been discussed, while much might have been said concerning extra-mural activities such as correspondence study, extension lectures, and other field service for which no place has been found.

Whether well or ill advised, the determining policy in the selection of topics has been to consider those phases of a school's life that bear most directly upon its educational procedure and success. An institution's per capita costs may have no consistent relation to its real performance, and a luxurious plant may house an unsatisfactory educational philosophy. Granted, however, a sound purpose and a knowledge of tested and successful procedure, an institution or a state may usually be trusted not to attempt more than its funds will permit it to do well. For this reason it is primarily the educational significance of a given scheme of organization and of its administrative working-out that should be subjected to careful and periodical review.

It was believed, moreover, that such a treatment would not only prove most helpful to Missouri, but would be of the greatest service elsewhere as well. The purposes for which teachers should be especially trained are virtually the same throughout the country, and it is greatly in the interests of our national solidarity to make this identity complete and emphatic. By virtue of this common purpose institutional

experience everywhere may be utilized in gradually building up legitimate standards of practice whereby any single institution may measure itself or be measured by others. It is to such common elements in the educational problems presented that this study has addressed itself. There are few of the situations here presented as occurring in Missouri that have not appeared in quite as acute form in many other, perhaps most, American states, and it is hoped that this more than local application may considerably enhance whatever merit the bulletin may possess.

B. METHOD AND PERSONNEL

The study was organized and conducted by Dr. William S. Learned, of the Foundation staff. Dr. I. L. Kandel reviewed the report and contributed the account of the rise of normal schools outside of Missouri. At every stage of the enquiry the experience in such studies of the President of the Foundation, Dr. Henry S. Pritchett, and of the Secretary, Dr. Clyde Furst, has been freely drawn upon.

Dr. William C. Bagley, Director of the School of Education at the University of Illinois when the study was begun, and now Professor of Education at Teachers College, Columbia University, was asked to make a special study of normal school curricula. Dr. Bagley has had extensive experience in elementary school work as well as in normal schools in both eastern and western parts of the country; he is responsible for most of the sections discussing the curricula and for innumerable helpful suggestions throughout the book.

The other participants in the study as a whole were Dr. Charles A. McMurry, Professor of Elementary Education at George Peabody College for Teachers, formerly director of the training department at the Illinois State Normal University and at the Northern Illinois State Normal School; and Dr. George D. Strayer, Professor of Educational Administration at Teachers College, Columbia University, and late President of the National Education Association. These gentlemen, altho already familiar with the Missouri institutions, visited them again for the present purpose, and their findings are embodied in the report.

Important use has been made at many points in the text of the statistics secured from teachers in service in the state. The work of assembling and collating these has been in charge of Mr. Homer W. Josselyn, previously Associate Professor of School Administration in the University of Kansas.

A specific contribution of much significance for its purpose was furnished by Dr. Walter F. Dearborn, Professor of Education at Harvard University. With the help of specially trained assistants from his department, Dr. Dearborn carried out an extensive series of measurements of various forms of school achievement in the training classes of the five normal schools. These tests supplied an indispensable check upon the judgments of the observers, with which they tallied to a surprising degree. The main results are printed in the Appendix.

Aside from the persons mentioned above, many others have rendered valuable aid as the study progressed, either by way of experienced judgment and advice or skilled technical assistance. Special acknowledgment is due to Mrs. Dorothy R. Roberts, to whom fell the arduous task of verifying and editing the mass of tabular material on which much of the study rests.

Of the method followed in the enquiry it may be said that it has been the intention to base conclusions only upon a first-hand knowledge of all the facts, wherever this was obtainable. All of the observers did considerable field work in the state, some of them spending several months there; personal written reports were made to them by practically every normal school instructor, and by three-fourths of the students in attendance when the schools were visited; many classes were attended, and personal interviews were had with a large number both of teachers and of students; the school records were carefully examined, and in many cases were verified by graduates. Conditions affecting the normal schools in the state at large were judged by an extended visit to the Ozark region, by interviews with many county superintendents and written reports from each one in the state, and by personal visits and interviews with the superintendents in the twenty-five largest cities of the state and written reports from nearly all the rest. The colleges of the Missouri college union were visited, and while the data collected from them are not contained in this portion of the report, these visits threw considerable light upon the work of the normal schools and upon educational conditions at large.

In the great number of facts and impressions thus gathered the authors have tried to distinguish the essential features of the institutional situation as they found it, tracing it, so far as possible, to the earlier conditions that had produced it. The catalogues and bulletins of all the schools from their establishment, and especially the annual reports of the State Superintendent of Public Schools from 1867 on, furnished a gratifying amount of material for a genetic treatment of this sort. The progress of the schools since they were examined in 1915 and 1916 has not been followed except in certain isolated details. The study was considered to have value not as giving a minute and complete account of certain institutions, but rather as an interpretation of the educational significance of a certain order of organization and administration caught as nearly as might be in cross section. Moreover, the most striking changes that have taken place since the schools were visited are due to abnormal conditions, consequent upon the war, and have an unnatural relation to what went before; there would be little point in describing these.

The spirit of the enquiry is of course critical, as befits any serious examination of arrangements intended to modify the education of a free people; any other attitude is obviously inconsistent with a true conception of public service. Nevertheless it would be impossible to frame or make headway with proposals for improvement without a sympathetic appreciation of conditions as they exist. Such an appreciation was facilitated to an unusual degree by the hearty and intelligent coöperation of

the men and women in the normal schools. With the rarest exceptions these workers met the representatives of the study apparently without other thought than to show clearly the real nature of their problems, and to aid in arriving at just and effective conclusions. It is to their aid that the authors are chiefly indebted. Without exaggeration, the normal school teachers themselves could be regarded as the authors of a large portion of the report, and if it has been urged therein that the development of the educational policies of the schools be entrusted in much greater measure to the abler teachers, it is because this conclusion has grown out of immediate contact with the persons available for such responsibilities.

C. A GENERAL STATEMENT OF CONCLUSIONS

DEMOCRACY AND EDUCATION

The subject of the present study is of surpassing importance to a democracy. An attempt has been made to describe and appraise the efforts of an American commonwealth to provide itself with suitable instructors for its youthful population. It will be generally admitted that the teachers of children and youth, while not the sole instruments, are by far the most influential instruments thru which a people may consciously control its future; that they directly determine in great part both the extent and the degree to which sound fundamental ideas pervade, unite, and move a people. The significance of an enquiry as to how those teachers are chosen and prepared is therefore apparent.

Furthermore, the importance of such a study is vastly increased at a time when the whole democratic scheme of life is emerging from a struggle with an opposing world-order that exhibits a singularly effective tho misdirected social organization. As an outcome of the conflict a sincere democracy is compelled to consider how it may exchange its earlier forms and institutions for more adequate expressions of its own cherished ideals; how it shall acquire the power for orderly and masterful action rising out of a clear national purpose, and combine this with its passion for freedom, truth, and justice in individual relations. The democratic conception of society has grown slowly by the groping application of a few fundamental notions, and is as yet scarcely more than in bud; its full bloom into a stable world-order promises a thrilling spectacle in which America may participate with great effect. What is the central condition, if there be such, on which this epoch-making development depends?

As a necessary means of self-preservation the consciously directed spread of true ideas has long been an admitted principle of democratic government; general intelligence has been dimly felt to be one of its objects, and the school has been accepted as a proper instrument thereto. But as the most effectual means for ensuring human safety, welfare, and growth; as the one defence against elements that would ruin the whole apparatus of orderly progress; and consequently as the central policy of a democratic organization, the wide diffusion of a high degree of intelligence has been

neglected to the present day. This is the task which now confronts us. The condition that will determine the successful development of a genuine democracy in America rests in our willingness to establish, as our foremost policy of public action, a popular education that is substantial and unequivocal.

Universal compulsory education, tho far from achieved, is a familiar slogan for which we make a brave stand; but to the duration and content of this education, and to the means used in providing it, we have paid little attention. Longer to countenance this delusion is to fail in our great experiment. Free and true ideas important to human welfare must be brought skilfully and vividly, and thru a prolonged period, not to prospective leaders only, as some would have it, but to every child and youth. To have this contact is his right as a candidate for membership in a democratic society; to profit by it must be made his primary obligation. Even our theory of universal education has hitherto been satisfied with a scanty offering formally presented and often properly declined; to pass it around to all was our main ambition. Henceforth, the state must assume responsibility for the product in the case of each normal individual from the beginning well thru adolescence. Hitherto, if each child attended a school for a few weeks in the year, it has been considered that the requirement was met; hereafter, it is indispensable that each child develop into what shall be, according to his abilities, an educated person, or show why that is impossible.

EDUCATION AND THE TEACHER

This shift in education from a nominally universal to a substantial basis involves preëminently and almost exclusively the teacher. So far as the state can provide education, the teacher is the substance of it. The measure of our past and present deficiency is startlingly revealed by the manner in which we have persistently evaded this fact. Education has been much, and on the whole reverently, on our lips, but so little have we grasped its purport that the sole factor which can give it reality and meaning, namely, the teacher, is grossly ill-equipped, ill-rewarded, and lacking in distinction. A school system with us is an elaborate hierarchical device that undertakes thru successive gradations of textbook makers, superintendents, principals, and supervisors to isolate and prepare each modicum of knowledge and skill so that it may safely be entrusted to the humble teacher at the bottom, who is drilled for a few weeks only, if at all, in directions for administering it ultimately to the child. Meanwhile superintendents and school boards publicly measure their success by numbers enrolled, by buildings and material equipment added, and by multiplied kinds of schooling introduced; and the people are taught to accept this as education. Such perversions are ample comment on the thoughtlessness of our formula. The school authorities are rare who by enlightened and fearless propaganda have convinced their public that education consists first of all in the superior quality and skill of its individual teachers, and is otherwise meaningless.

Veritable education, as contrasted with the present dependence upon estimates by

bulk and housing, signifies a complete transformation in the character and status of the teaching profession. Such a transformation once properly accomplished, the other necessary modifications will inevitably take care of themselves. America, with its hundred millions of people, needs upward of three-quarters of a million men and women to represent her with the childhood and youth of the nation in a deliberate and thorough educative process. If wars are to cease and democracy is permanently to hold the field, it will be a democracy with sufficient wisdom to confide this, its most responsible task, to its most competent citizens, and to prepare them thoroughly for its safe discharge. Genuine education, in a sense consistent with any honest vision of its meaning, can proceed only thru immediate contact with keen minds fully informed and persuaded of what the rising generation may become, and dedicated to such achievement. Persons so equipped will in general not be had unless the distinguished rewards and opportunities of life are attainable thru teaching careers. Moreover, these careers must not be mere avenues of promotion, as in notable cases to-day, but must constitute and be recognized as opportunities for achievement in themselves. Any other course means simply to exploit the future in the interest of the present by abandoning its control to second-rate minds. Plato's provision that the head of the state be the director of education expresses the unavoidable perspective in a completed democracy.¹

NEW STANDARDS ESSENTIAL FOR GENUINE EDUCATION

Marked changes must ensue in our present system of schooling if we undertake to carry out an honest interpretation of our avowed aim of "universal education" by making it not only universal but also education. In the first place our elementary and secondary school systems must be thoroughly integrated into one homogeneous and indivisible unit—a varied but coherent twelve-year career for mind and body, whereby, as a youth, each citizen may acquire a certificate of the health, intelligence, and character that underlie a successful society.

This done, distinctions of training, experience, and salary among teaching positions within this unit must also disappear. Proper training for teaching the third grade should be as prolonged and as serious as training for teaching the tenth or twelfth grade, and should be equally well rewarded. To pass childhood thru a graded quality of instruction in order finally to place those who survive in charge of real teachers only at the top is a blunder that explains more of the dire results noticeable in our schools than we dare acknowledge.

If the status of all teachers, upper and lower, urban and rural, is to be approximately the same in an honestly equipped school system, what shall that status be? The standards of preparation cannot well be lower in amount than those now demanded for superior secondary instruction. Four years of well-directed training sub-

¹ The State of Vermont already has the enviable distinction of paying its commissioner of education more than any other state official, including the governor.

sequent to a high school education is sufficient, with selected material, to lay the foundations of a superior teacher. Experience, skilled practical guidance, and further specialized study, attended always by discriminating selection, should result in a group having relatively high mental and social power and fit to serve any community as leaders. For to lead youth effectively implies, by any acceptable definition, the power and resources required to lead the community also.

On the other hand, if training of any sort can provide men and women who are equipped and willing to serve youth as youth should be served, their service is pre-eminent. To the individual parent, as to the state, it is quite the most appealing good, after physical health; and it is altogether a more difficult service than any other to render well. Teachers that approach such a standard of work, therefore, will require the recognition and rewards commensurate with it. This is a test of shifted values that can be met in America with the greatest ease. No question of obligation to a class is involved; it is a case simply of an enlightened democracy purchasing for the future goods that shall make it great. Billions cheerfully spent for defending and extending liberty abroad are a challenge, whatever the cost, to broaden and make sound the foundations of liberty at home.

In the schools the attainment of such a standard would modify many things. The present methods and attitudes of supervision would disappear; its hierarchy would be transformed. Organization would, of course, remain, but the pupil would meet directly and constantly a well-selected and tested leader prepared to speak with personal effect and to win response by virtue of trained intelligence. Such leaders, instead of taking minute orders from higher officers, would themselves assume the responsibility, in joint action, for the conduct and development of instruction—the life-long business of capable minds. In other words, education would become *a first-hand process by skilled practitioners* like any other professional service, instead of a second or third hand operation with its consequent perfunctory effects.

A NEW TRAINING FOR TEACHERS

The degree of selection and training contemplated promises another sweeping improvement of far-reaching importance. In the teacher of to-day the slight preparation required and the casual way in which the work may be picked up or dropped result in a person bred to routine and conformity, possessing little original insight for his work. He forms one of a secluded class, protected as well as repressed by the rigid machine of which he is a part. To correct this, we need to pick out men and women of large ability and give them a long and thorough preparation aimed solely at their future task. By so doing we can entrust our schools to independent and self-possessed personalities who fairly represent the spirit of their time, who bring the schools into the vital current of events, and make them closely responsive to the criticisms and aspirations of the people they serve. Thus only can we secure a sensitive and flexible education that moves intelligently and surely on its path.

In demanding for all teachers the standards now required for good secondary instruction, the reference is to their amount only. To make a teacher in the sense outlined above, which is the only sense in which teachers can be of use under future conditions, the present form of preparation, elementary and secondary alike, needs revision. It is a matter primarily of point of view. The average secondary teacher to-day is a person who has taken a college course for his own sake and as he chose. At or near the close thereof he has concluded to "go into teaching"—temporarily, and with no thought of the requirements of a difficult profession. The elementary teacher in the country districts is untrained; in the cities he, or more frequently she, has sometimes undergone specific training, but oftener, particularly in the West, his elementary school service has been a time-marking occupation until he could secure college points sufficient to "promote" him to a high school, itself a temporary stopping-place on the road to a profession or, in the case of women, to marriage. In either group the point of view of the public service is neither enforced by the public nor dreamed of by the teacher. The public confesses by the measure of its own rewards that the quality of its teaching service is no supreme or vital matter to it, if only the forms are there according to the letter of the law. It therefore offers its candidates, in lieu of professional training, an education that fits their general needs, and invites them in the intervals of study to come and manage the schools for awhile in order to fill their purses.

We are fast learning that if democracy is to have genuine education and survive, this sort of thing must cease. The hollowness of the process has its faithful counterpart in the hollowness of the teacher's plan and purpose. For a serious educative undertaking, the way must be paved by a thoroughly well-organized course of training, directed toward the specific work to be done, and exhausting our professional resources in that field. The task is difficult and responsible enough even with the most liberal training we know; to omit this, or to conceive the work as an incidental diversion for the employment of "general culture," is to miss the point completely. The first and sole consideration in planning a teacher's preparation is the question: Does this feature contribute most to the effective discharge of the particular duty in view, as the welfare of the service requires? Personal considerations are beside the mark.

Circumstances in America have made us largely dependent upon women for the teachers we have, and the proposals made above might not completely equalize men's share in instruction even at three or four times the present salaries, tho it would tend to do so. Whether this ensue or not, the steps suggested would at least remove the meaningless restriction of the profession to unmarried women. To teach well is the privilege of maturity and experience; it is the prerogative of men and women of affairs, of fatherhood, of motherhood; it is the business of brains and a vigorous social participation that draws the pupil into the stream of interesting and instructive persons and events. What have immature girls to do with this except as they prepare to make it the main object of their lives irrespective of marriage?

The changes urged above have one other interesting and important implication. The attainment of an integrated school system, manned by teachers of similar and homogeneous training for the purpose, involves a like simplification and coördination of our agencies for preparing teachers. To-day normal school and university reflect and perpetuate the traditional cleavage between elementary and secondary school. In the best instances there is involved here only the friction of overlapping territory rather than essentially unsympathetic views of the process by which a teacher should be prepared. However far apart some normal schools and some universities may be, the enlightened and progressive elements of each party are moving along the same intellectual road.

The time has come to clear up the existing confusion. All institutional education for the teaching profession should be placed clearly upon a collegiate footing and organized under a single competent direction as a part of the state university, where one exists, parallel with medical, legal, engineering, and other similar divisions of higher education. This signifies no "concessions" either to the university or to the normal schools. "Normal" schools should drop that name, and as professional colleges of education should become an acknowledged part of the greater university whole simply because they are a part of the state's system of higher education, which is all the term "university" now implies. We would thus secure a unified and centralized authority prepared to deal in a consistent and efficient manner with the state's largest problem in higher and professional education.

THE TEACHER AND THE PUBLIC

The type of teacher here proposed is a radically different individual from his present prototype, and demands a vigorous and discriminating introduction to the public that he is intended to serve. It is the public that must purchase the services of such a teacher; it is the public, therefore, that must be convinced of his worth.

Upon the teachers themselves the outward responsibility for such a movement cannot fairly be placed; from them may reasonably be expected the maximum development and refinement of their own procedure—a far more conclusive argument for more of it, at its best, than any "demands for social justice" to teachers as a class. To double or to treble the public investment in such service, to extend largely its resources by broader and richer training, to seek a selection of ability preëminently suited to its purpose—this is a matter of public policy, and has nothing to do with the personal needs or demands of any group of people. This is the work primarily of that portion of the educated public that knows the value of good teachers. Specifically, it is to school superintendents and school boards, and, above all, to state commissioners of education, that the public has a right to look for reasoned and convincing insistence that the best teachers are worth while, and it is they who are responsible for organizing public opinion to demand that the best teachers be employed. It is of relatively small importance that teachers should be well paid merely

because they are teachers, but it is of supreme importance to any society that competent teachers who are capable of fine service should be amply rewarded and carefully protected throughout their careers.

To attain this it is proper, not that teachers themselves should agitate, unionize, and strike, but that school executives, municipal and state, in well-organized campaigns, should rally their thousands of lay supporters and attack city and state governments and the uninformed public opinion about them in the interests of better teaching. Leadership of this sort in the protection and promotion of a community's most precious asset is the foremost duty of state and city superintendents. It is their business to make an abundance of good teaching an arresting and winning cause in chambers of commerce, churches, rotary clubs, labor unions, and similar civic and social organizations of citizen parents who control taxation. Fine instruction does not at present prevail in American communities simply because it is not understood; the average parent's interest in his child's school is almost imperceptible, not because his interest in his child is not profound, but because the teaching purpose and process has never taken the parent convincingly into its confidence. That such a confidence would too often exhaust the uncertain and ill-prepared teacher has not assisted the exchange. Parent-teacher associations have rendered an important service by promoting helpful social relations between home and school, but they obviously have not taught the parent how to discriminate between the teaching now provided and the better teaching that might be provided, nor is that their purpose. Here is a field almost completely unworked. Enthusiasm and personal sacrifice to secure good teaching for his children are latent in well-nigh every parent. He must, however, know definitely and vividly what good teaching is, and he must understand clearly that its value is on the whole directly related to its cost. Convince any American public that the alleged products of a fine teacher are real, and the cost will speedily become a wholly secondary consideration.

THE PRESENT CRISIS IN PUBLIC EDUCATION

It is scarcely appropriate to present a study of conditions affecting the future progress of public instruction in the United States without more than passing reference to the situation of the teacher arising from the universal economic dislocation now ensuing upon the recent war. Within a few months the value of a teacher's salary or "wages" has fallen approximately fifty per cent. There is nothing ominous about this fact, inasmuch as the same thing has happened to every other salaried professional worker in common with the rest of the world, but there are portentous possibilities in the failure of school authorities to make a prompt repair of the damage their first obligation.

Readjustment is slow for several reasons, but chiefly because it is assumed to be a question merely of the personal comfort of a class of public servants instead of an immediate menace to the welfare of the children and indirectly of the communities of

which they form a part. Popular pressure governs public taxation. Orderly children comfortably housed exert no pressure. Their teachers may descend the full scale of excellence with little popular protest and with an agreeable decrease in the budget. Where this result can be achieved simply by letting salaries stand still, as at present, those taxpayers who are intent solely upon their income make full use of the opportunity before the friends of education find their voices. To-day, therefore, instead of a sensitive public opinion moving swiftly to defend our finest possession, we have the unhappy spectacle of a rapidly accelerating exodus from the staffs of public schools throughout the country; and very many schools cannot open their doors because of lack of teachers, even the poorest.

The situation is complicated by a further unfortunate but obvious difficulty. The school superintendent of any given community should be the one intelligent and determined stimulus or rallying-point, as the case may be, for all forces seeking better public education. As a matter of fact, however, conditions of tenure in this country have been such that in probably the majority of communities the school superintendent feels more keenly and responds more readily to the pressure of the "business interests" than to the less vociferous appeals for better schools. Superintendents who stake their careers on the one really important objective in their entire program—better salaries for better teachers—court removal, or loss of influence. Hence the real initiative in such a proposal is more often awaited from other sources, or is left to the school board as it may be moved to emulate other cities. The numerous and splendid examples of the contrary courageous policy, by skilfully attracting popular support, have steadily improved standards of salary, and have given American schools what excellence they possess. In such a crisis as the present, these men gather up all the weight of a public sentiment that they have assiduously organized and cultivated, and save their hard won gains by bringing their teachers' salaries promptly to the new level.

It may safely be said that it is not the intention of the American people to sacrifice the American school, both present and future, to the whim of a sudden economic upheaval—an upheaval, the net result of which, far from touching the country's resources, has produced such material expansion and enrichment, both absolute and relative to other countries, as few nations in history have ever yet experienced. Wealth for public education is potentially available as never before. Personnel, too, is abundant. To-day, as always, the supply of "born teachers" is far beyond the demand. The sole need is to make it worth while for gifted teachers to secure thorough training and to spend their lives in providing that which every intelligent adult most desires, both for himself and for his children, and that which alone in the end exalts a nation.

All of the elements in the situation favor not only a speedy recovery of the old equilibrium, but a notable shift of wealth and emphasis in favor of far better public schools, that is, of far better teaching, than has ever been known before. Our illumi-

nating experiences with education, both positive and negative, in our own army; the significant disclosures of the war in the behavior of foreign nations, both allied and opposed, as a result of their educational practices; the greatly refined definition of the democratic human purpose and ideal as the assured outcome of the long struggle; and finally, the general shock of pervasive change and rapid readjustment that has delivered us from old conventions and favors fresh attitudes;—all of these novel and impressive considerations urge us manifestly in one direction. There probably never was a time in our history when popular education could be brought so easily into a permanently larger financial perspective, when an abundance of good teaching could be made available with such unanimity from all sides, as just now.

Those who desire this outcome of the present opportunity must move to its accomplishment, and the foremost requirement for the purpose is simply the indispensable steering-gear of all successful democratic progress—the effectual organization and thrust of a resolute public opinion. Whether set in motion by a skilful superintendent as his main line of defence, or operating in spite of deputed agents, there should be for every school system an independent and unofficial organ of approval or criticism wherewith to focus progressive opinion, to invigorate official ideals, or to turn the scale of wavering decisions in favor of the better cause.

Just now, especially, there is needed in every community that has not already doubled its appropriations for teachers' salaries in the present emergency, a vigorous Citizens' Committee for Public Safety in Education. Let such a body first conduct a more or less formal referendum on the present issue, clearly stated: "Shall the persons with whom our children are obliged to spend five to six hours daily in school, obeying their directions and absorbing their ideas, be a dull and sordid group of spiritless wage workers, or shall they be select and skilful men and women possessed of such intellectual and social power and status as we desire our children—all children—to assume?" Then let this body do its utmost to give the verdict immediate effect by demanding greatly increased rewards, better conditions of work, and, above all, longer training and more critical selection.

When the actual desires of the individual parents, and of all other generous and far-sighted minds everywhere, become clearly articulate on this point there will be no "crisis in education;" there will be only the overwhelming recognition that the teacher must represent, not another worker merely, like the rest of us, but a spiritual institution; that, before all others, this person, set as a copy and guide to youth for months and years together, must be the visible embodiment of the ideal that the present generation holds for its successors. It will then be agreed that those fine personalities that can render this service must be cherished and protected, enabled to live life as life is meant to be lived, and encouraged to transmit its best product to our children who create the future.

II

THE STATE OF MISSOURI

SURFACE FEATURES

MISSOURI is one of the larger states and among the wealthiest in the American Union. It lies along the west bank of the Mississippi River, extending in rhomboidal shape thru some four degrees of latitude northwest from parallel $36^{\circ} 30'$, which is likewise the southern boundary of Kentucky and Virginia. The Missouri River ("The Great Muddy"), from which the state derives its name, forms the northern part of its western boundary as far as Kansas City. Turning eastward at that point, the river crosses the centre of the state to a point near St. Louis on the Mississippi, thus furnishing a natural highway between these two important centres in which the large affairs of the entire region are mainly transacted. In length of navigable waterways within or on its borders Missouri stands fifth among the states.

The total area is about seventy thousand square miles, or nearly two-thirds that of the kingdom of Italy. The northern, northwestern, and western portions contain some of the most productive farm land in the country, while the south central section is occupied by the low dome of the northern Ozarks, in general elevations of from eleven to sixteen hundred feet above the sea. These give place in the extreme southeast to a small area of Mississippi lowlands, where conditions are typically southern.

CHARACTERISTICS OF POPULATION

The population within these limits represents the coalescence of several elements. While the territory was still in French and Spanish hands, many Americans, chiefly from the southern states, found their way past the French colonies and trading-posts that lined the Mississippi, and took up homesteads in the interior. When the Louisiana Territory was purchased by the United States in 1803, about three-fifths of the inhabitants, largely confined to what is now Missouri, were Americans, including what negroes they brought with them, and after that date the immigration from Kentucky, Tennessee, and Virginia continued yet more rapidly. From 1815 on, arrivals from north of the Ohio were numerous, tho not until some time after the Civil War did they tend to dominate the state.¹

Not far from one-fourth (22.7 per cent) of the entire population is of foreign extraction, and of this element about one-half is German; Irish, English, and Russians are the next in frequency, tho in small proportions. The German element is an old

¹ The reports of the county superintendents shortly after the Civil War throw some light on immigration from other states as it affected education. Thus in 1868 Clinton County reports: "The Eastern teachers are generally well qualified." The Greene County superintendent says: "A large majority of our teachers were educated in the East, and came here expressly to teach." And the superintendent in Henry County gives the following interesting information: "We have a very fair corps of teachers." From "Ohio, seventeen; Indiana, eleven; Missouri, ten; Illinois, five; Iowa, two; Virginia, two; Kentucky, one; New Hampshire, one; New York, one; Vermont, one; Pennsylvania, one; Wisconsin, one; Tennessee, one; and Canada, one." These teachers received from \$35 to \$40 per month—not much less than teachers in the same district to-day. (See Report of the Superintendent of Public Schools, 1868. This annual publication will be referred to hereafter as the *State Report*.)

one, appearing first about 1845, and passing its maximum inflow long before the century closed. The attitude of the state toward slavery as well as its progress in education seems to have been favorably affected by these newcomers. Most immigrants from abroad prefer urban to rural conditions. In 1910 persons of foreign birth or parentage constituted thirty-eight per cent of the white urban population in Missouri, and only twelve per cent in the rural districts. The total proportion of foreign birth in 1910 showed no increase since 1900. The countries from which the increases relative to 1900 were largest are Greece, Turkey, Roumania, Hungary, and Mexico; Russia and Italy more than doubled the number of their representatives and Austria nearly so.

In total population Missouri, with about three and one-quarter millions, ranks seventh among the states, altho its land area gives it only the eighteenth place. Nearly five per cent are negroes—a slowly dwindling element largely confined to towns; slightly over one per cent of the Missouri farmers are negroes. About three-fifths of the total population live in the country or in places with fewer than twenty-five hundred inhabitants. This class diminished somewhat (3.5 per cent) between 1900¹ and 1910, while the urban population increased more than one-fifth during the same period. Seventy-one out of the one hundred fourteen counties showed a loss in 1910 as compared with twenty that had decreased in 1900, while the absolute gain in St. Louis City, St. Louis County, and Jackson County, where Kansas City is located, far outweighed the gain—six per cent—in the state as a whole. In density of population Missouri leads all states west of the Mississippi, and is similar to New Hampshire, Michigan, and Virginia in the East.

OCCUPATIONS

The distribution of occupations in Missouri follows closely that of the United States as a whole. While not quite so typical as Indiana or Wisconsin, the state exhibits a disposition of occupations that is wholly representative of the country at large. The distribution in 1910 of persons ten years of age and over who were engaged in gainful occupations in the United States and in Missouri was as follows :

	<i>Agriculture, Forestry, and Animal Hus- bandry</i>	<i>Extraction of Minerals</i>	<i>Manufacturing and Mechanical Industries</i>	<i>Trans- porta- tion</i>	<i>Trade</i>	<i>Public Service</i>	<i>Profes- sional Service</i>	<i>Domestic and Per- sonal Ser- vice</i>	<i>Clerical Occupa- tions</i>
U. S.	33.2%	2.5%	27.9%	6.9%	9.5%	1.2%	4.4%	9.9%	4.6%
Missouri	35.5	2.1	23.6	7.1	11.1	1.1	4.7	9.8	5.0

As appears above, the emphasis falls on the agricultural rather than on the manufacturing phase of industry, altho both are important. Missouri ranks fifth among the states in the total value of its farm property, which showed in 1910 a relative

¹ Missouri was one of six states with diminished rural population in 1910, New Hampshire, Vermont, Ohio, Indiana, and Iowa being the others.

increase greater than in any decade since 1860; it ranks tenth in the value per acre of its farm land, and sixth in the total value of its crops, of which cereals, chiefly corn, constitute two-thirds. As the number of farmers decreases, the size of farms increases slightly; the proportion of tenant farmers has remained nearly the same during the past thirty years—thirty per cent.

In manufactures Missouri is the ninth state in number of establishments, tenth in total value of manufactured products, and eleventh in number of wage-earners. Three-quarters of the manufacturing is done in ten cities of ten thousand or more inhabitants, two-thirds of it in St. Louis and Kansas City alone—the only cities in the state having over one hundred thousand inhabitants. The particular industries are well distributed. The following furnish the greatest proportions of the total value of manufactured products: slaughtering and meat-packing (13.9 per cent), boots and shoes (8.5 per cent), flour-mill and grist-mill products (7.8 per cent), and printing and publishing (5.2 per cent). In value of mining products Missouri ranks eleventh. Over two-thirds of this comes from lead and zinc mines, which furnish about seventy per cent of the entire American output of these metals.

POLITICAL HISTORY

Politically the state fills a unique place in the story of the nation's development. On its admission as a slave-holding state in 1821 was conditioned the freedom of all other territory north of its southern boundary, included in the Louisiana Purchase of 1803. As a border state of the early southern group it was peculiarly accessible to northern influences, and soon developed a strong anti-slavery minority. This party held the state for the Union during the Civil War, and induced it voluntarily to abandon slavery and to sacrifice nearly as many lives in the Union cause as did Massachusetts. After ten years of radical Republican government during and after the Civil War, the state gradually returned to its normal democratic affiliation, which it retained until 1909. Since then its parties have been more evenly balanced. The first constitution of 1820 was overthrown by the upheaval during the war, and was followed in 1865 by an instrument containing a remarkable mixture of intolerance and reform, to which in protest succeeded the constitution of 1875, a conservative, and in some respects repressive, fundamental law under which, with occasional amendment, the state has operated ever since. A revision is greatly needed and apparently very generally desired.

EDUCATIONAL DEVELOPMENT

In education Missouri has furnished an instructive chapter, particularly in its experience with the idea of public schooling at public expense. The characteristic feature of its history in this respect has been the struggle between a well-informed and devoted educational leadership and an exceedingly conservative legislative opinion. The attitude of the public mind was first determined by the traditions of the

original settlers from southern states, where education was a family matter to be accomplished thru private neighborhood coöperation, or by means of tutor and governess. The idea of free public education was associated habitually with charitable provision for poor and orphaned children.¹ This point of view was further sanctioned by a religious motive, which operated with more or less vigor to retain all education under sectarian influences. The impulse to education was as active in early Missouri history as anywhere else in the nation. Denominational colleges were established literally by the score. The Baptists alone, the most numerous among Protestant denominations, founded sixteen colleges, of which four still survive. But enthusiasm for free schools, controlled and supported by state and local authority and independent of religious affiliation, was a slow growth.

Previous to 1824, therefore, educational legislation was confined to the chartering of private academies. The legislation of 1824, 1835, and 1839, altho foreshadowing a system of free public schools, was either wholly inoperative or but partly effective. Taxation for school purposes was in general hotly opposed by the rich, and by those who had no children. "Subscription" schools, where for perhaps a dollar a month per child a teacher would give instruction as long as he could hold attendance, abounded in all parts of the state. An act of 1853 permanently established a state superintendency, except for the period of the Civil War, and marked progress in financial support, but in 1861, altho all counties were organized, about one-fourth of the school expenses was still supplied from tuition fees. It was then estimated that one hundred thousand children in the state at large did not attend school, and that nearly one-fifth of the organized school districts had no schoolhouses.²

The close of the Civil War found radical elements for the first time in control. These immediately set out to popularize the free public school, and succeeded to the extent at least of securing "qualified toleration," as Superintendent Monteith put it. Normal schools won a foothold; centralized county supervision was inaugurated, and for a time the outlook for public education was bright, only to be clouded again by the reaction of 1874 and 1875, when the earlier balance of opinion was restored. County superintendents were then abolished contrary to the judgment, it would appear, of nearly every important educational authority in the state, and in spite of continued agitation they were not restored until 1909. The normal schools fought for their lives in the legislature for ten years or more, and when finally accepted, were but meagrely supported. The constitution of 1875 laid down financial restrictions that have ever since made the state appear to be throttling its own educational interests.

Thru all this the educational leaders of the commonwealth have held a true course; the state has at least been well advised. The whole series of state superintendents,

¹ The charter of Ste. Genevieve Academy, 1808, provides that the children of the poor and of Indians shall be taught gratis. The constitution of 1820, Art. VI, Sec. 1, reads: "One school or more shall be established in each township as soon as practicable and necessary where the poor shall be taught gratis." The school law of 1839 provides schools at which children of "indigent persons" are to be admitted without payment toward the teacher's wages and without supplying their allotted share of the fuel. (Art. IV. Sec. 31, 42.)

² *State Report*, 1861, pages 107, 108 (Senate-Journal, 21st G. A. Sess. 1, App.).

with scarcely an exception, altho of necessity party men, and not always broadly educated, labored heroically, regardless of party, for a sound and effective program. While recording chiefly their helpless struggles with confused and inadequate legislation, their annual reports have urged unremittingly the best and most obvious practical improvements. To these efforts were added the generally harmonious support and propaganda of the university and normal schools, the private colleges, and other institutional agencies. From about the turn of the new century, and with the disappearance of the preceding generation of lawmakers, this tedious campaign of education began to bear fruit, and the period since then has witnessed some excellent constructive legislation—the beginnings of a system worthy of the needs and resources of a great state.

As a problem for education, and particularly as a problem in the preparation of teachers for a public school system, the State of Missouri may fairly be regarded as typical of the country as a whole. Characteristics of surface and population are markedly representative. In their organization of public education the northern and western states are in general superior, while the southern states fall somewhat, often considerably, behind. If certain significant criteria given usually in the reports of the United States Commissioner of Education be reviewed, the rather low average position of the state becomes apparent. These rankings of 1915-16 give the following result:

	<i>Amount</i>	<i>Rank among States</i>
Average expenditure per capita of population five to eighteen years of age	\$19.97	32d
Average number of days attendance for each child five to eighteen years of age	96.1	25th
Average number of days attendance by each pupil enrolled	118.5	30th
Average number of days schools were kept	161.8	29th
Number attending daily for each 100 enrolled	73.2	27th
Proportion of school population enrolled	81.08%	18th
Proportion of secondary school attendance ¹	15.4%	28th
Average monthly salary of all teachers	\$69.19	21st
Income of permanent school funds	\$872,289.00	7th
Illiterates among native whites of native parentage	3.4%	35th

In six of the ten items given above, Missouri ranks below the median, and in a seventh the state is itself the median among the forty-nine independent units that constitute the nation. The relation of school expenditure to the per capita wealth of the state would appear to be of equal importance with the points already noted. But the fact that Missouri ranks twenty-ninth in per capita wealth and twenty-seventh in proportion of school expenditure thereon loses much of its apparent meaning as an educational measure, when it is considered that Massachusetts ranks twenty-

¹ Not given in the Commissioner's Report. The figure used here is the proportion of secondary students in public and private schools, 1915-16, with reference to the population from 15 to 19 years of age, inclusive. The latter factor was secured by taking, of the total population, as estimated by the Census Bureau for 1916, such a proportion as the age group in question constituted of the total population in 1910. For Missouri this was 10.1 per cent. The absolute proportion thus arrived at is, of course, open to criticism; for purposes of comparison, however, the measure is significant: it ranges from 35.1 per cent in California to 5.5 per cent in South Carolina.

seventh in per capita wealth and third in the proportion expended for schools, while Idaho ranks thirty-first in wealth and leads the states in the proportion given to schools.¹

However closely this condition in Missouri may approximate the average or median, the reason for it is hardly typical of those other communities in which a similar or worse state of public education exists; in Missouri it is simply an acquiescent attitude of mind that is responsible, whereas elsewhere the situation is usually complicated by difficult racial considerations. A thriving university of national importance, six prosperous normal schools, a half a score of private colleges of good repute—all bear testimony to a vigorous intellectual life; while the metropolis of the state possesses a school system that competent critics consider among the first two or three in America. Such a state may have whatever it most desires.

¹ These figures are taken from the Commissioner's Report for 1917, and are for 1912.

III

ORIGIN AND GROWTH OF NORMAL SCHOOLS

A. THE ORIGIN OF NORMAL SCHOOLS IN THE UNITED STATES

EARLIEST ADVOCACY OF TEACHER-TRAINING

THE recognition that a teacher should have qualifications for his profession somewhat more specialized than the vague requirement that he be a "fit person" appears to have dawned faintly toward the close of the eighteenth century. In 1789 there appeared in the *Massachusetts Magazine* an "Essay upon the Importance of Studying the English Language Grammatically," in which the author advocates the establishment of a public grammar school in each county in place of the existing Latin grammar schools. "At the head of this county school I would place an able preceptor, who should superintend the whole instruction of youth entrusted to his care, and who, together with a board of overseers, should annually examine young gentlemen designed for schoolmasters in reading, writing, arithmetic, and English grammar, and if they are found qualified for the office of schoolkeeping and able to teach these branches with ease and propriety, to recommend them for this purpose. No man ought to be suffered to superintend ever so small a school except he has been first examined by a body of men of this character and authorized for this purpose." It may be objected that this statement is not a definite advocacy of training for the teaching profession; it will be admitted, however, that the insistence on proper selection and some form of certification are at least essential steps in the direction of more adequate professional preparation.

Professor Denison Olmstead, of Yale College, was more specific in his commencement address in 1812 on "The State of Education in Connecticut." Here is presented a definite recommendation of a seminary for schoolmasters in which "the pupils were to study and recite whatever they themselves were afterwards to teach, partly for the purpose of acquiring a more perfect knowledge of these subjects, and partly for learning from the methods adopted by the principal the best modes of teaching." The course was to include lectures on the organization and government of schools. Eleven years later another Yale professor, James L. Kingsley, advocated in the *North American Review* the establishment of an institution "intermediate between the common schools and the university." "Such a measure would give new vigor to the whole system of education. The board of visitors, which now decides on the qualifications of instructors, must be, in most instances, a very imperfect check on the intrusion of ignorance. The teachers, it is understood, have now very seldom any other preparation than they receive in the very school where they afterwards instruct, or in the school of some neighboring district, where the advantages for improvement are no better." In a pamphlet, *Suggestions on Education*, also written in 1823, William Russell, a teacher in the New Township Academy in New Haven, who in 1826 became the editor of one of the earliest American professional magazines, the *Journal*

of *Education*, supported Professor Kingsley's recommendation and attributed the inadequacy of the common schools to the lack of trained teachers. This defect could be removed by the establishment of seminaries for the training and licensing of teachers.

EARLY EXPERIMENTS

The suggestions of Kingsley and Russell had been anticipated by a few months by the Rev. Samuel R. Hall, who, after a successful teaching experience of eight years, opened a seminary for the training of teachers at Concord, Vermont, in March, 1823. In 1829 Hall published the first American textbook on education, *Lectures on School-Keeping*, which had a great vogue in many parts of the country, and in New York State and Kentucky was officially distributed among the teachers. When the Teachers' Seminary was organized in 1830 as a department of the Phillips Academy at Andover, "to afford the means of a thorough scientific and practical education preparatory to the profession of teaching," Hall became the first principal and remained until 1837, when he took charge of another school at Plymouth, New Hampshire. Lecturing in 1833 on the "Necessity of Educating Teachers," Hall stated that "there is not in our whole country, one seminary where the educator of children can be thoroughly qualified for his important work." He then referred to the thirty seminaries in Prussia and to a few schools in Massachusetts which "devote particular attention to the qualifications of teachers, but yet in connection with a general school for the common purposes of education." He clearly had in mind the establishment of separate professional institutions, when he urged, "Educate men for the business of teaching, employ and pay them when educated."

Neither the establishment of the seminary at Concord in 1823 nor its subsequent success appears to have attracted much attention. Efforts to secure the establishment of institutions for the preparation of teachers became more frequent and more insistent about 1825, and apparently the movement was spontaneous and for a time, at any rate, was but slightly influenced by foreign example and practice. In 1825 Walter R. Johnson, of Germantown, Pennsylvania, wrote *Observations on the Improvement of Seminaries of Learning in the United States, with Suggestions for its Accomplishment*. Foremost among his suggestions was that for the establishment of seminaries for teachers similar to those existing in Prussia. "A perfect plan for the education of teachers and professors would require that the institution with which the school for teachers is proposed to be connected should embrace a complete circle of the sciences and arts, and that a professor should be appointed to lecture on the mode of teaching in each separate department." The professional preparation should include the study of the theory and principles of education, school practice and government, and the science of mental development. In the same year Philip Lindsey, the acting president of the College of New Jersey, in an address at Princeton urged that "Our country needs Seminaries purposely to train up and qualify young men for the profession of teaching. We have our theological seminaries, our medical and law schools,

which receive the graduates of our colleges and fit them for their respective professions and whenever the profession of teaching shall be duly honored and appreciated, it is not doubted but that it will receive similar attention and be favored with equal advantages." Later in the same year, in his inaugural address as President of the University of Nashville, Lindsey emphasized the same point. John Maclean, another Princeton professor, subsequently president, recommended in 1828 "the establishment (by the state) of an institution to educate young men for the business of teaching."

DEVELOPMENT OF PUBLIC OPINION

These isolated instances indicate the tendencies of the day, but the popularization of the idea of preparing teachers was not due to these writers. The earliest contribution to the subject which attracted general attention was Thomas H. Gallaudet's *Plan of a Seminary for the Education and Instruction of Youth*, which appeared in the *Connecticut Observer* in 1825. "Why not have an institution," asks Gallaudet, "for the training up of instructors for their sphere of labor, as well as institutions to prepare young men for the duties of the divine, the lawyer or the physician? . . . Such an institution would also tend to elevate the tone of public sentiment and to quicken the zeal of public effort with regard to the correct intellectual and moral education of the rising generation." The curriculum of this institution should include the common branches of English education and the theory and practice of education. A library and practice school should be connected with the seminary. Connecticut's debt to Gallaudet was later recognized when the students of the first normal school established in the state, at New Britain in 1850, formed a Gallaudet Society.

In 1824-25 James G. Carter, the "father of normal schools," entered upon the task of urging the establishment of normal schools in Massachusetts, and did not lay it down until the first state normal school in this country was opened at Lexington in 1839. His *Essays on Popular Education*, which appeared in the *Boston Patriot*, attracted considerable attention not only in this country but also abroad. He argued that it was uneconomical to expend money on education until satisfactory and well-qualified teachers could be secured. The mere possession of knowledge was no guarantee of ability to communicate it. "When instructors understand their profession, that is, in a word, when they understand the philosophy of the infant mind, what powers are earliest developed and what studies are best adapted to their development, then it will be time to lay out and subdivide their work into an energetic system of public instruction." The institution for the training of teachers should be maintained by the state as part of the free school system, and should include a library and a school for children of different ages. It is significant that Carter does not yet refer to foreign examples, but puts his scheme forward as something new and visionary. In 1827 he petitioned the Massachusetts legislature to appropriate money for the establishment of a state institution for the training of teachers. On the refusal of the legislature he opened a private seminary at Lancaster in 1827, but met with little success.

EXAMPLE OF GERMANY

New influences, however, began to make themselves felt about 1830. The theorists discovered that everything that had been urged in favor of the preparation of teachers had already been put into successful practice in Prussia and elsewhere. Henry E. Dwight in his *Travels in the North of Germany in 1825-1826*, which appeared in 1829, devotes one of his letters to an account of seminaries for the Education of Schoolmasters. He points out that "to understand a subject will not of itself enable one to impart a clear view of the best mode of communicating knowledge to the minds of children. This capacity can only be acquired by previous preparation or by long experience." He had great hopes of the results of such seminaries. "Were such schoolmasters provided for the education of youth in Connecticut, the intellectual character of the mass of inhabitants would, in one generation, not only become superior to that of every other people, but it would become the wonder and admiration of our country."

EFFORTS OF EDUCATIONAL LEADERS

After 1830 the work of propaganda was definitely taken up in professional circles, and the efforts continued unremittingly until they were crowned with success about ten years later. In 1831 William C. Woodbridge began to urge the importance of training teachers in his *Annals of Education*, and in June of that year gave an account of the Prussian system. To the Rev. Charles Brooks is due the chief credit for the popularization and the ultimate acceptance in Massachusetts of the idea of teacher-training. His attention was directed to the subject during a visit to Europe in 1834 and by prolonged discussion on his return voyage with Dr. H. Julius, who was sent to this country by the Prussian government to investigate prison conditions. In a Thanksgiving address delivered at Hingham in 1835 he advocated the establishment of teachers' seminaries and proposed a series of conventions to be held in Plymouth County to promote the idea. The first convention was held in December, 1836, and was followed by five others. Untiring in his efforts, Brooks addressed meetings in various important centres in Massachusetts in 1836 and 1837, and extended his endeavors to New Hampshire, Vermont, Rhode Island, Connecticut, New Jersey, and Pennsylvania. Everywhere he took as his theme the statement, "As is the Teacher so is the School," and drew his illustrations and examples from Prussia and Holland. The influence of Dr. Julius has already been mentioned; an outline of the Prussian system by him was printed in 1835 with legislative documents in Massachusetts and New York. To this was added the inspiration that Brooks derived from M. Cousin's *Report on Public Instruction in Germany*. The translation of this work by Sarah Austin, with an introduction by J. Orville Taylor, was published in New York in 1835, and in the same year a paper, printed in 1836 and based on Cousin's *Report*, was read before the American Institute of Instruction. Further information on the Prussian educational system was furnished in the widely distributed reports of Calvin E. Stowe

(*Elementary Education in Europe*, 1837) and of Alexander D. Bache (*Report on Education in Europe*, 1839).

THE TERM "NORMAL SCHOOL"

It was at this period that the term "normal school" began to replace "teachers' seminaries." There can be no doubt that this was due directly to Cousin's *Report on Germany* and the subsequent *Report on Public Instruction in Holland*. Cousin merely applied the current French term to the corresponding institutions in the countries visited by him. The French system of training teachers had hardly begun to have a national status when Cousin made his report. The Convention had, on October 30, 1794, decreed the creation in Paris of an *École Normale* in which citizens of the Republic over the age of twenty-one and already instructed in the useful sciences should be taught how to teach and then go back to their own districts and in turn train other teachers. It was intended that the course should last four months, but the experiment, with which were associated such men as Lefrange, Laplace, Monge, Haüy, and Bernardin de St. Pierre, failed. It is interesting to note that the Committee of Public Instruction adopted this idea from the plan successfully employed by the Committee of Public Safety to train citizens drawn to Paris from all parts of the country, in the processes for manufacturing gunpowder and cannon. In a note to his *Lecture on Normal Schools and Teachers' Seminaries* Stowe wrote, "The French adjective *normal* is derived from the Latin noun *norma*, which signifies a *carpenter's square*, a *rule*, a *pattern*, a *model*; and the very general use of this term to designate institutions for the preparation of teachers, leads us at once to the idea of a *model school for practice*, an essential constituent part of a *Teachers' Seminary*." The term *école normale* does not appear to have been employed earlier than 1794. The successful establishment of a state system for the preparation of teachers in 1832 was due to the success of the normal primary school founded in Strasbourg in 1810 and planned on the German model.

Beyond contributing the title, the French system does not appear to have exercised any influence on the development of normal schools. There can be no doubt that the promotion of the idea of training teachers was directly influenced by the Prussian example. Brooks himself had no hesitation in recognizing this influence. In a lecture on the *History of the Missionary Agency, in Massachusetts, of the State Normal Schools in Prussia*, delivered in 1864 at the Quarter-Centennial Normal School celebration of Framingham, he stated, "I must say, that to the Prussian system of state normal schools belongs the distinctive glory of this day." He was conscious, however, of the political limitations of the Prussian system; "though I preferred the Holland system of governmental supervision, I concluded to take the Prussian system of state normal schools as my model and guide." The adoption of the Prussian model was evidently not undertaken blindly; the essential social and political differences between the two countries were clearly recognized and debated. "There were a few papers that

laughed at me," said Brooks, "as a dreamer wishing to fill a republican state with monarchical institutions."

TEACHER-TRAINING IN GERMANY

Experiments in the training of teachers had been under way in Germany for more than a century before the attention of American students was directed to them. Duke Ernest of Gotha had contemplated the establishment of special courses for preparing teachers in 1654, but an exhausted treasury led to a postponement of the scheme until 1698. In 1696 Francke had instituted at Halle a *Seminarium praeceptorum* to furnish teachers both for his orphanage and higher schools. His example inspired several of his disciples, especially Johann Julius Hecker, who opened an institution for the preparation of teachers in Berlin in 1748; here provision was made for the study of a large number of academic subjects, pedagogy, and method, and for practice teaching. A royal grant was made to Hecker's schools in 1753, and an order was issued by Frederick the Great that all vacancies in schools on royal domains and later throughout Prussia should be filled with teachers trained under Hecker. Unfortunately Frederick's practice of filling school positions with veterans from his armies defeated his own purposes, and the beginning of the nineteenth century saw the Prussian elementary schools in decline.

From this condition the schools were saved by the rapid and extensive establishment of normal schools under the direct influence of educators who had visited Pestalozzi. In 1803 J. E. Plamann, who had been a student at Burgdorf, established a normal school in Berlin which received royal recognition two years later. At this time the government sent a few students to Yverdon; on their return these men established institutions for the training of teachers or became inspectors of schools. Since the government did little to codify the school regulations or to organize the curriculum of the schools, the great progress in elementary education that was noticed by American observers was due almost wholly to the rapid increase in the number of trained teachers consequent on the multiplication of normal schools. In 1806 there had been eleven such institutions, to which four were added in 1811 and 1812; in 1825 there were twenty-eight and in 1840 thirty-eight. They offered a three-year course, and under the influence of Harnisch at Weissenfels and Diesterweg at Mörs had become powerful instruments in raising both the intellectual and professional status of teachers. Ludwig Beckedorff was especially influential in promoting the welfare of the normal schools. From 1821 to 1827 he was councillor in the Ministry for Public Worship, Education, and Public Health, with special charge of normal schools and elementary education. He gave particular attention to the former in the belief that the standards of elementary education could be more effectually raised thru the improvement of teachers than by relying on the amateur efforts of the provincial and local administrative machinery. In 1826 the professional status of elementary school teachers was clearly defined by the issue of regulations for the examinations of candidates at

the close of their normal school training and again after not more than three years of probationary service. The existence of such conditions was bound to strike the foreign observer; and it was the report of these conditions that profoundly affected the movement for the preparation of teachers in the United States.

LEGISLATIVE ACTIVITY IN MASSACHUSETTS

The establishment of state normal schools became a practical issue soon after Carter's election to the legislature in 1835. He had the full support of the American Institute of Instruction, which he had helped to found in 1830 and before which he had lectured in 1831 on "the necessary and most practicable means of raising the qualifications of teachers." In 1836, as a member of the Committee of Education, he advocated the establishment of a seminary for the professional education of teachers, and in the following year he drafted the bill establishing the first Board of Education in Massachusetts. On its creation he became one of its first members. In January, 1837, the Institute presented a memorial to the legislature praying "that provision may be made for the better preparation of the teachers of the schools of the Commonwealth." This followed an earlier resolution at a meeting held in Boston at which it was

"Resolved, That the business of teaching should be performed by those who have studied the subject as a profession. *Therefore, Resolved*, That there ought to be at least one seminary in each state, devoted entirely to the education of teachers; and that this seminary should be authorized to confer appropriate degrees."

In the same year Brooks lectured on the subject of teacher-training before the House of Representatives. In the following year the Board of Education, stimulated by the promise of a gift of \$10,000 conditional on the appropriation of an equal sum by the legislature for the purpose of improving the qualifications of teachers, passed resolutions "accepting the proposition and authorizing the Governor, with the advice and consent of the Council, to draw his warrant upon the treasurer for the sum of ten thousand dollars, to be placed at the disposal of the Board for the purpose specified in the original communication." In these resolutions, as well as in securing the gift from his friend Edmund Dwight, Horace Mann played an important part. He had in the same year delivered before the Plymouth County Association for the Improvement of Common Schools a lecture on *Special Preparation, a Prerequisite to Teaching*, and, as he indicated in the following year, he had definite views on the superiority of a specifically professional institution over the academy plan of New York. The cumulative efforts of the educational stalwarts of the period, Carter, Brooks, Woodbridge, and Mann, culminated in the opening of the first public normal school in the country at Lexington on July 3, 1839, followed two months later by the opening of a second normal school at Barre on September 4, 1839, and of the third at Bridgewater a year later, on September 9, 1840. In 1845 it was resolved by the Board of Education "that the schools heretofore known as Normal Schools shall be hereafter designated as State Normal Schools."

The length of the course in these normal schools was one year. Boys were admitted at the age of seventeen and girls at sixteen after declaring their intention to qualify themselves to become school teachers, and after passing an examination in orthography, reading, writing, English grammar, geography, and arithmetic. The course of study included "orthography, reading, grammar, composition, rhetoric and logic; writing and drawing; arithmetic, mental and written, algebra, geometry, bookkeeping, navigation, surveying; geography, ancient and modern, with chronology, statistics, and general history; human physiology, and hygiene or the laws of health; mental philosophy; music; constitution and history of Massachusetts and of the United States; natural philosophy; the principles of piety and morality common to all sects of Christians; the science and art of teaching with reference to all the above named subjects." Attached to each normal school was an experimental or model school in which the students practised under the supervision of the principal and the observation and criticisms of their fellow students; "here the knowledge which they acquire in the science of teaching is practically applied. The art is made to grow out of the science, instead of being empirical." Thus were laid down the main lines of the American normal school.

NORMAL SCHOOL DEVELOPMENT IN CONNECTICUT

In Connecticut the movement for the training of teachers became active in 1838 after the passage in that year of the act to provide for the better supervision of common schools. Henry Barnard, as chairman of the committee that reported this act, urged the importance of the problem of teacher preparation in the House of Representatives, and in 1839 the *Connecticut Common School Journal* published a number of articles discussing this subject and giving a history of normal schools in Prussia, Holland, and France. This was followed in the next four years by the republication of the works of Gallaudet, Stowe, and Bache. In the *First Annual Report of the Secretary of the Board of Commissioners of Common Schools*, Henry Barnard urged the establishment "of at least one seminary for teachers." Barnard was even ready to accept a compromise temporarily by the setting up of teachers' departments in academies, altho he was himself convinced that the normal school was the institution ultimately desirable. In 1839 he inaugurated a voluntary course for teachers at Hartford, in which a number of specialists lectured on academic subjects and methods of teaching, and Barnard on the relations of the teacher to the school system, parents, and pupils, on school hygiene, teachers' associations, and methods of interesting parents. Barnard continued his campaign, and in his *Third Annual Report* declared that "the most effectual way of improving the qualifications of teachers, of creating in them, and in the community, a proper estimate of the true dignity and usefulness of the office, of carrying out into practice the soundest views of education, is to establish at least one institution for their specific training." Some of the objections that were raised and met by Barnard were that teachers could be trained in colleges,

academies, and private schools, that special training is wasteful owing to the brief professional career of teachers, that special normal schools cannot turn out sufficient teachers nor districts pay sufficiently high salaries to encourage training, that the expense would be great, and, finally, that the normal school was objectionable as a foreign importation. A committee of eight appointed by the General Assembly reported in favor of normal schools in 1845, and three years later another committee, after visiting normal schools in Massachusetts and academies in New York, made a report similar to that of the earlier committee. In 1850 the movement culminated in the establishment of the first normal school at New Britain.

THE NEW YORK PRACTICE

The development of teacher-training in New York State differed from that in New England. Governor De Witt Clinton urged the establishment of a seminary for teachers in his message to the legislature in 1826, but John C. Spencer, chairman of the literature committee, insisted that the training of teachers should be entrusted to the colleges and academies. In 1827 an act was passed "to provide permanent funds for the annual appropriation to common schools, to increase the literature fund, and to promote the education of teachers." Altho no provision was made immediately for the third purpose, this is the first act in the country for the education of teachers. A few training departments in academies were reported in 1831. A definite step was taken in 1834, when it was provided that "the trustees of academies to which any distribution of money shall be made by virtue of this act shall cause the same to be expended in educating teachers of common schools in such manner and under such regulations as said Regents shall prescribe." Owing to inadequate funds, only eight academies were recognized for the purpose, and eight others were added in 1838. Besides academic subjects, teachers in training were required to study moral and intellectual philosophy and principles of teaching. In 1840 the Rev. Alonzo Potter of Union College was commissioned by the state superintendent to visit and report on the work of the academies. He found that the teachers in training were more interested in the academic than the professional studies; they did not stay for the full length of the course, three years; and no practice teaching was provided, altho this deficiency was not of importance since most of the students had already taught. He advocated a course of eighteen months to two years, with differentiation for teachers in rural schools and primary schools in villages and cities, and commended the special normal schools of Prussia and France. Such schools, he declared, "devoted exclusively to the preparation of teachers have some advantage over any other method." Horace Mann's view on the subject has already been mentioned. Spencer, however, continued his opposition, and eight more academies were recognized as training centres. Colonel Samuel Young, his successor, was of the opinion in 1843 that the money was diffused over too many schools, and in the following year, under the influence probably of a report on the Massachusetts normal schools

by the Chairman of the Assembly Committee on Colleges, Academies, and Common Schools, a bill was passed establishing the State Normal School at Albany, and leading to the discontinuance of training in the academies. No further progress was made with the establishment of state institutions until the appropriation of a state grant to the Oswego Normal School in 1862 and the final adoption of the school as a state institution four years later.

NORMAL SCHOOL OR ACADEMY?

The divergent practice in the early training of teachers in New York State and New England led to interesting discussions of the problem wherever the question came up. In Michigan John D. Pierce, in his *First Annual Report* as superintendent in 1836, advocated the training of teachers at institutions organized upon either the Prussian or New York models. In 1843, however, Superintendent Ira Mayhew stated in his *Report*, "Normal schools, designed expressly for the education of professional teachers, are indispensable to the perfection of any system of national education." A normal school act was passed in 1849, and in 1853 the Ypsilanti school was opened. In 1862 the academy system which had been established in Maine in 1846 was declared to be a failure, and two normal schools were then established "to be thoroughly devoted to the work of training teachers for their professional labors." The State Superintendent, the Rev. Edward Ballard, declared that "the opinion has been but too prevalent that a high school or academy can qualify teachers as well for their work as the institutions especially established for this purpose. . . . But it must be a fallacious supposition to consider, that the discipline in either of these cases can be equal to the regular, systematic and thorough drill of the full proposed normal course." The same problem came up in Wisconsin, when in 1857 the legislature appropriated twenty-five per cent of the income from swamp lands for normal schools. Instead of establishing normal schools, the Board of Regents decided to distribute the money to colleges and academies maintaining normal classes, which were organized by Henry Barnard, who became agent of the Normal Regents in 1858. The experiment was not successful, for in 1863 Superintendent J. L. Pickard wrote in his *Report*, "These normal departments of colleges, academies, and high schools have not satisfactorily met the necessity. They are almost always subordinate departments; nor will the aid furnished warrant giving them a prominent place. Much good has been accomplished by these agencies, but they are at present inadequate to the demand. Permanent normal schools are needed, whose sole business shall be the training of teachers." A normal department was opened in the University in 1863, followed by three normal schools in 1866. In his report for that year the Superintendent, John G. McMynn, made a statement on the subject which deserves the consideration of all who are interested in the professional training of teachers:

"The development of our Normal School system is the most difficult educational problem that presents itself for solution at the present time. To make

these schools promote the interests of public education, to so conduct them as to secure for them the confidence of the people, to so manage them as to train teachers in them for the common schools, to guard against the tendency to convert them into academies or high schools, to render them so attractive and so efficient as to bring large numbers of teachers under their influence, and to carry them on with such economy as to keep their expenses within the income provided for their support, will demand the watchful care of the people, the heartiest coöperation of the Legislature, and the greatest discretion and wisdom of the Board appointed to manage them.

"They may be well attended, the discipline may be excellent and their teachers well qualified; classes may graduate with honor, and the people may cherish a just pride in the attainments of those who have pursued their course of study; in fact they may be excellent colleges, but if they are not training schools for teachers, and if everything else be not kept subordinate to the specific object for which they were founded, the result will be disastrous, not only to these schools, but to our whole educational system. The success of Normal Schools in other states—while it has been such as to warrant a hope that the policy we have inaugurated may be successfully carried out—has not been so marked and so uniform as to assure us that we shall not encounter difficulties that prudence, forecast and energy alone will enable us to overcome."

By 1870 the question had been virtually settled everywhere in favor of normal schools. The list presented in the Appendix¹ gives the date of the first establishment of state normal schools throughout the country. In some states the schools had been preceded by training departments in colleges, academies, and high schools; in others, particularly in the south, by teachers' institutes.

THE NORMAL SCHOOL IN 1866

There was at this time no consensus of opinion or practice on the length of a normal school course, which varied from one to three years. There was, however, considerable agreement on the content of the curriculum. The course of study adopted in Massachusetts in 1866 covered a period of two years, and included arithmetic, algebra, geometry, chemistry, grammar and analysis of the English language, rhetoric and English literature, geography and history, physiology and hygiene, botany and zoölogy, natural philosophy, mineralogy and geology, astronomy, mental and moral science, the civil polity of Massachusetts and the United States. The theory and art of teaching included principles and methods of instruction, school organization and government, and the school laws of Massachusetts. The variations that occurred elsewhere were due to the influence of Oswego; at Ypsilanti the course of study introduced in 1863 included, besides the elementary subjects, object lessons in geography, common things, colors, geometrical figures, botany, zoölogy and properties of bodies, and drawing. At Winona, Minnesota, the "best methods of teaching" went side by side with the academic study of subject-matter, while the theory and practice of teaching included "intellectual and moral philosophy; lectures on the principles of edu-

¹ See page 418.

cation; history of education; didactic exercises or sublectures; observation in model school; preparation of sketches; criticism lessons in teaching; teaching in practice school; and school laws of Minnesota." Thus the main lines that were to mark the future development of the normal school were already laid down when the Missouri system was inaugurated. Some, at least, of the problems that were later to disturb the even development of the normal schools appear to have come to the surface. In Massachusetts, for instance, "the Board [in 1866] deem it unwise to encourage the formation of regular advanced classes, whose instruction cannot fail to divert a considerable amount of the time and attention of the teachers from the undergraduate course." In general the defects of the day were not unlike those found at a later date. The students suffered from inadequate preparation and fitness; they did not remain long enough to profit by the course; the faculties were too small; and on the whole the normal schools attempted to do too much for pupils of every type.

EARLY VIEW OF THE FUNCTION OF A NORMAL SCHOOL

It is not out of place to present by way of summary a contemporary view of the function of the normal school, given in a special *Report of the Commissioner of Common Schools* in Ohio presented to the General Assembly in 1866:

"The course of instruction in most of the Normal Schools of this country is two years, with a one year's course in a few of them, for teachers of primary schools. While the one single object is to increase the teaching power of the student, the exercises have practically a four-fold aim:—

"1. To impart to the student a thorough teaching knowledge of all the branches ordinarily taught in common schools. This includes not only a mastery of the subjects as knowledge, which is the first requisite for successful teaching, but also a mastery of them as subjects to be taught to others. This is the one distinctive idea which runs through every lesson and exercise.

"2. To impart to the prospective teacher a practical knowledge of the guiding principles of his art, and to enable him to reduce such principles to something like a philosophical system. In other words, the second aim is to teach the science of education. This is usually sought to be accomplished by lectures.

"3. To impart to the teacher a knowledge of the best methods of instruction and government, including the methods specially applicable to each stage of the child's progress and to each branch of knowledge. This part of the course is sometimes united with the first, each recitation being conducted with a view of unfolding the true method of teaching the topic. But in all Normal Schools where instruction in methods of teaching is made duly prominent, separate exercises are also devoted to the subject.

"4. To impart to the student skill in the art of teaching by an application of his knowledge of principles and methods in actual practice. For this purpose most Normal Schools have a Model or Experimental Department, in which the students practice under the supervision and criticism of a skilled teacher. In the best Training Schools these model-lessons, as they are called, are made the basis of instruction in methods. In some Normal Schools the practice of the students is obtained by giving model lessons to their own classes."

B. NORMAL SCHOOLS IN MISSOURI

For the preparation of teachers in the public schools of Missouri the state has developed, in addition to the university, six institutions supported, except for certain fees, wholly by legislative appropriation. Five bear the numbers of the districts that they serve, and are usually referred to by the name of the city in which they are located. In the order of their establishment as state schools they are: Kirksville and Warrensburg, 1870; Cape Girardeau, 1873; Springfield and Maryville, 1906. The sixth, Lincoln Institute, is a school for colored teachers located at the capital, Jefferson City. As its problems and conditions differ considerably from those in the other schools, it is not included in the main discussion.¹

EARLY EFFORTS

Massachusetts was scarcely more than committed to its new institution for training teachers (1839) when the obvious value of the plan was recognized and similar schools were advocated by educational officers in many states. In Missouri, except for the war's interruption, there was a persistent and steadily widening campaign from 1842 until the school at Kirksville was established in 1870. State superintendents, and secretaries of state who served *ex officio* at times in their stead, urged the usual arguments in annual reports, and one governor (1844-48) came forward with an elaborate plan for a combined industrial and pedagogical school. "Home teachers for home schools" as against inferior "foreign or imported teachers" was a popular cry in a state where one-fourth of the districts had no teachers, and three-fourths of those that had teachers secured them from outside the state.² As to the precise nature of the desired institution, proposals varied from a normal department in the university to a scheme for an independent school in each congressional district—eight in all; but the only early legislation on the subject was an act of 1849 establishing a professorship of theory and practice of teaching in the state university, and a system of two-year scholarships for each county—all to be financed with an annual appropriation of \$1000. The university took no action. In 1856 the Missouri State Teachers Association at its first session passed resolutions in support of normal schools, possibly inspired thereto by Horace Mann, who attended the meetings. This movement had local effect the following year in the establishment of the St. Louis City Normal School, later known as the Harris Teachers College. But the war halted the efforts for state schools until, at its meeting ten years later (1866), the reorganized teachers association took up the subject again in an emphatic memorial to the General Assembly.

JOSEPH BALDWIN

The prospect was not unfavorable, therefore, when, in 1867, Joseph Baldwin came from Indiana to open his normal school at Kirksville. Altho a private venture, it

¹ See page 385.

² *House Journal*, 1857, 19th Adj. Sess., Appendix, pages 116, 117.

was started as an avowed forerunner of a state system, and Baldwin entered at once into an energetic campaign to place it on that footing. As a leading figure in the professional education of teachers in Missouri for the next dozen years Joseph Baldwin deserves more than passing notice. Born in Pennsylvania in 1827 and educated at Bethany College in Virginia, he early sought the frontier, teaching for four years in western Missouri—1852–56. During the next eleven years he conducted four different normal schools in Indiana and Pennsylvania, attended a fifth, and served a year in the army. He apparently found his work when he came to Kirksville, for his subsequent career was more stable. A man of modest scholarship, Baldwin seems to have been a noble, strongly emotional soul, who took up his cause with the ardor of an evangelist. He was himself an elder in the Church of the Disciples of Christ, and selected two ordained ministers as his first assistants. For all of them the educational appeal was a veritable gospel, and this became and long remained the note of the whole normal school movement in Missouri. The primary task has been to arouse and inspire country boys and girls, usually handicapped by lack of funds and defective early training, to secure an education. Large numbers of normal school teachers have labored to this end with splendid, almost apostolic, zeal and have done an incalculable amount of good.

THREE STATE INSTITUTIONS AUTHORIZED

In 1870, after much agitation and several unsuccessful attempts, legislation was finally secured providing for two institutions to be controlled by a single, central board of seven men, the location of the schools to be auctioned off to the towns making the highest bids in land and cash appropriations. A third institution for south-east Missouri was voted in 1873. The change from a central board to local boards in 1874 will be discussed later; but space may be taken here to comment on this method of locating state educational institutions—the method followed in all subsequent cases.

METHOD OF LOCATING EDUCATIONAL INSTITUTIONS

The principle seems to be based on the assumption that to have any particular community profit by the presence of a state institution is intolerable, but as such advantage cannot well be avoided, the community should first be made to pay as much as possible for the privilege. While the financial saving to a wealthy state is negligible, the community paying the bonus has generally laid its plans to “take it out of the school” at the first opportunity, thus winning for the new institution not friends but exploiters, who claim not only legitimate business but often “jobs.” In 1871 Superintendent Monteith protested against a plan that engendered “so much of local strife and bitterness besides tempting an ambitious community to assume a burden of taxation heavier than they are able to bear.”¹ Warrensburg was forced to repudi-

¹ *State Report*, 1871, page 20.

ate \$50,000 of her pledge of \$200,000, and Rolla, after securing the state school of mines with the help of a bond issue of \$75,000, succumbed in a similar fashion by going to court and proving the action to have been taken in an unconstitutional manner. Even when in possession the towns have had to defend their title: when the university was destroyed by fire, the people of Columbia were literally "held up" for a fresh bonus of \$50,000.

Aside from entirely ignoring the educational merits of the problem, the bad effects of this system have been marked. Kirksville and Chillicothe were involved in a bitter legal wrangle over the first school in the northern district. The Springfield institution narrowly escaped going to a border town, Webb City, a fate which, perhaps not unluckily, overtook the third district school because of Cape Girardeau's four thousand dollar margin over Ironton in a property valuation, altho Cape Girardeau was at the time sixteen miles from a railroad. To its decided detriment the fifth district school was located at Maryville, all but out of the state; while Warrensburg, on a single railroad and but one county distant from Kansas, won over Sedalia, a thriving and more centrally located town, which in 1871 was connected in five of the six different directions in which its railroads radiate to-day. *The clear lesson from Missouri's experience is that state schools should be located by a competent educational commission on educational considerations only, and that the state should pay all the bills.*

CHANGES IN STATUS AND IN SCOPE OF WORK, 1871-1914

As originally planned and as conducted for the first thirty years of their history, the normal schools offered a four-year course based approximately upon the graduation requirements of the elementary school. A convenient break came at the end of the first two years, and during this early period by far the larger number of students took only this preliminary work,—the majority, probably, only the first year either in whole or in part. A preparatory year long paralleled the upper grade work for mature students who had not completed the elementary school; and a graduate honor was offered for successful experience and a course of reading. Practice schools were contemplated from the outset, and have been maintained except for certain lean years when lack of funds forced their suspension. The summer session, which is now more largely attended than all others, was first introduced as a private venture of the faculty at Warrensburg in 1894,¹ and has had an extraordinary growth, due not a little to favoring legislation² whereby successful attendance could be counted in lieu of examinations for certificates.

Until 1904 the schools could be technically rated only as secondary institutions. Their character was in fact somewhat different. Most of the advanced students were mature men and women, who had had some, often considerable, experience as teachers; they were a select group with unusually industrious habits, and could not fairly

¹ *State Report*, 1896, page 85.

² *Ibid.*, 1902, page 2; 1906, page 15.

be compared with the strictly secondary type of student. There were some also who had received a secondary education elsewhere, and were taking only the professional work of the normal school. With such a body of students the transition to a genuine collegiate status seemed a simple matter.

In 1904 an agreement between the three existing schools had the effect shortly of placing the last two years of the four-year course on a time level with early college work. High school graduates were given credit for ten of the eighteen units in the four-year "normal" course, and as the number of high school graduates steadily increased, the last eight units came eventually to correspond to the first two collegiate years. For a while thereafter the first two years of the "normal" course were made to do duty for the entire high school period by fitting in more or less elastic preparatory terms. For a considerable time also the high school graduates took their professional work in low grade classes with students of less training. Gradually, however, the first two years were expanded into a four-year high school course, professional work was largely deferred to the collegiate years, and the present organization appeared. Coincident with the change of 1904 was the projection of two "post-graduate" years leading to the degree of Bachelor of Arts, which included the single year of advanced residence work, recognized by the degree of Master of Pedagogy, that had been announced shortly before.

GROWTH IN NUMBERS

The success of the summer school with its favorable effect on the total enrolment¹ has tended to obscure the actual extent of institutional growth during the recent period of expansion. The average attendance from term to term at Warrensburg's regular session, taken over a period of six years, 1893 to 1898, was six hundred thirty-one, and from 1911 to 1914 it was seven hundred nine, or a gain of twelve per cent. Cape Girardeau shows an increase from two hundred forty-four to four hundred sixty-three, or ninety per cent; and Kirksville, from four hundred fifty-eight to six hundred thirty-three, or thirty-eight per cent.² For a period of sixteen years of recent development in this type of normal school a joint increase of thirty-five per cent is certainly moderate, and is much nearer the truth than an apparent gain of one hundred forty per cent based on the total annual enrolment. The two new schools at Springfield and Maryville, established midway in this period, may appear to have checked the growth of the others. As a matter of fact, however, these have served sections of the state that were ill represented before.³

¹ For an expression of the enrolment of 1914 in terms of a standard unit of enrolment for one year, see page 428.

² At Cape Girardeau the facts were available for only four of the six years in the first period. At Kirksville the average attendance from 1893 to 1898 was lacking, but was inferred to be seventy-one per cent of the average total enrolment in the regular session, this being about the proportion at the other two schools.

³ In 1916 over half of Maryville's spring enrolment (268) was from the local county, and with those from counties immediately adjoining, made up seventy per cent of the school's total attendance. Greene County, in which Springfield is located, sent one student to the regular session at Warrensburg in 1904-05, the year before the school was established at Springfield, but sent 274 to Springfield in 1914. Six contiguous counties sent ten to Warrensburg in 1904-05 as compared with 188 to Springfield in 1914. Nine per cent only of the regular session students at Warrensburg in 1904-05 came from counties in the present Springfield district.

OPPOSITION

It was a decade or more after their organization before the schools could be said to be secure in public opinion. Attempts at abolition were initiated in every legislature but one from 1871 to 1883.¹ The constitution of 1875 protected the university, but left the normal schools at the mercy of statutory law; they therefore shared the fluctuating support of the public school system itself in a community where the tradition of the free public school was not yet strong. Throughout the seventies the catalogues annually devote several pages to general defence; in 1880 the Kirksville bulletin declared: "Success has been achieved in the face of stupendous difficulties. To secure the necessary means seemed a hopeless task. At every step bitter and determined opposition has been encountered. Public sentiment in Missouri was largely opposed to popular education, and hence opposed to Normal Schools, the best means of elevating the common schools." Superintendent Shannon considered that the definite resolutions of support secured in the Democratic Convention of 1880 marked the end of this opposition,² altho as late as 1895 President Osborne of Warrensburg observed that "in some sections of the state there is strong opposition to the employment of Normal School graduates."³ The position of the schools was further embarrassed by the pronounced objection of envious towns that saw in them only local benefits. They charged the state with supporting institutions to take the place of local high schools. Even the small elementary practice schools were attacked as so much further aid to local education. These critics pointed chiefly to the high proportion of local attendance that has characterized all of the normal schools from the beginning—a feature that is marked even after allowing for residents attracted to the town by the school itself.

FINANCIAL STRUGGLES

The struggle for existence, altho finally successful, kept the schools impoverished and uncertain of their future. At Kirksville the state spent \$50,000 to finish the plant after the county had laid out \$75,000. But Cape Girardeau alone built the first home for its school at a cost of \$50,000, and Warrensburg, after spending \$150,000, waited ten years for \$10,000 from the state with which to complete its building. In the meantime, at Warrensburg (1880) teachers gave up part of their salaries to obtain money enough to finish off rooms in which to teach, and students gave entertainments to pay for the sidewalks. The annual appropriation to each school was reduced in 1877 from \$10,000 to \$7500, and at Kirksville two-thirds of that was long held up by the auditor. As late as 1893, the state appropriations at Warrensburg lacked \$5000 of the amount needed to pay the teachers alone; and for over twenty-five years this school had no appropriations for library or apparatus, the necessary sums being eked out with small incidental fees, or with tuition from students not pledged to teach or coming from outside the state.⁴

¹ *History of the First District State Normal School*, by E. M. Violette, 1905, page 82. ² *State Report*, 1880, page 35.

³ *Ibid.*, 1895, page 85.

⁴ For a complete list of biennial expenditures from appropriations, see page 441.

EFFECT OF POVERTY ON THE SCHOOLS

This policy of near-starvation could not fail to react seriously on the operation and reputation of the schools. In fact, continued financial embarrassment in the face of a pressing opportunity seems to have been the principal cause of their weakness. Every new student that could be corralled, and every old student that could be retained, was valuable both for his fees and as a means of additional pressure on the legislature for more funds. What this led to educationally is seen in President Osborne's protest in 1886: "The classes are necessarily very large, numbering, in some instances, from sixty to seventy members. This renders proper classification impossible under the circumstances. The teachers are overworked, their best efforts are checkmated by a bad classification, and both discipline and scholastic acquirements suffer in consequence."¹ Yet there were few attempts to hold the numbers within limits consistent with good results. In 1889 Warrensburg did raise the age of admission for girls to sixteen, the same as for boys, and President Osborne notes that "this change considerably reduced the rate of increase in attendance for the year 1890, but the enrolment is still much too large for the number of teachers employed."² Kirksville and Cape Girardeau declined to follow.

Consequently it is not surprising to find State Superintendent Coleman, himself a product of the normal school, declaring in 1889: "One real trouble has always existed in our normal schools: the students try to do the work required in too short a time. The course of study is not too comprehensive, but students are admitted too young on too low a standard of scholarship, and then pushed too rapidly."³ He urges the elimination of all primary work, a minimum age of sixteen for admission, and a reasonable four-year curriculum that actually requires four years. Of course very young students, rapid promotion, and the consequent early diploma or degree, mean more students; and, paradoxically perhaps, by holding out a degree close at hand, these policies mean longer attendance by each student, thus bringing us again to the fundamental consideration—enrolment. All of these tendencies in the normal schools have persisted almost if not quite to the present day, and appear distinctly traceable to the legislator's policy that considers gross enrolment as the main justification for increased appropriations.

RELATIONS WITH COLLEGES AND UNIVERSITIES

Conditions such as these were inevitably reflected in the opinion of outside institutions with which the normal school came into competition. Reference is made here not to the several "private normals" and small denominational colleges, most of which have since disappeared,—schools that from time to time made common cause in attacking the certificate privileges of the normal schools, and that on at least two occasions⁴ came close to success. It is a question rather of the reputation of the state nor-

¹ *State Report*, 1886, page 119.

² *Ibid.*, 1890, page 114.

³ *Ibid.*, 1889, page 27.

⁴ 1895 and 1905. See Violette, *op. cit.*, page 83.

mal schools among the stronger institutions of recognized collegiate standing. These colleges, to be sure, had secondary departments, and were therefore in direct competition with the normal schools; the university itself maintained such a department until 1893. Furthermore, many normal school students and nearly all graduates were as old as the average college student. President Baldwin had projected an institution which, in his phrase, was to become the "peer of the college," and which did at first essay many college subjects. Conditions which it could not control, however, soon brought the normal school to the level of its low admission requirements; while its advanced classes were left empty, it was overrun with elementary, short time students; and its financial support was such as to make good educational standards impossible in handling such large numbers.

On the other hand, the university and the better colleges were steadily climbing upward; admission requirements were gradually advanced; students entered at least for the year and usually for the entire course. While the normal schools were necessarily local in their sympathies, the colleges, and particularly the university, were seeking their places in the larger fraternity of scholars, and were jealous of the standards that placed them there. The normal schools were victims of an isolated statutory and economic situation that governed completely the material with which they dealt and the terms of their own operation, while the higher schools were lifted and carried along more or less by the current of national educational opinion.

It is not to be wondered at, therefore, that with no agency at hand to bring about and maintain a mutual understanding, friction should arise the moment the question of recognition of credit appeared. The nature of entrance requirements and the method of their enforcement; the basis on which advanced standing is accepted; the whole system of school credit for promotion and graduation; the organization and sequence of courses; the accuracy and completeness of classification; the training of instructors and the conditions under which they work,—questions like these become vital when institutions agree to a mutual interchange of accounts; and it is around these points that the criticisms by other institutions have centred. These criticisms became acute when the normal schools began consciously to provide for the preparation of teachers for high schools. High schools in Missouri have sprung largely from the elementary school system, and have carried up out of the elementary ranks the best of the elementary teachers. For small schools there was no alternative. Finding themselves thus in possession of the field, the normal schools have naturally and very fortunately assumed the burden of making these high school teachers as good as possible. Meanwhile the strong, fully accredited high schools the country over have in general desired a college-trained staff. Consequently as weak schools became strong schools the problem grew more perplexing. Can the normal school give as suitable and thorough training for high school teachers as the college? If not, why not?

In the absence of a state authority empowered to study and accommodate the situation, controversy has run high both in Missouri and elsewhere, and has done injustice

to both parties. The service performed by the normal schools has been in itself worthy and devoted. They have been a powerful and ceaseless leaven of righteousness and progress operating where no other existing force could operate. This fact all honest observers must recognize. Their achievement should not be obscured or belittled by criticisms aroused thru their aspirations for academic rating. It is inevitable and proper in view of their past history, however, that if such rating be accorded, the normal schools should demonstrate their fulfilment of the standards by which they seek to be judged. Such fulfilment can hardly be by affirmation merely; the burden of proof rests with them.

IV

GOVERNMENT AND CONTROL OF MISSOURI NORMAL SCHOOLS

A. THE PRESENT SYSTEM

CONTROL FIRST VESTED IN A SINGLE BOARD

At the time of their establishment the responsible oversight of the state normal schools was lodged with a single board of regents. As this arrangement is in marked contrast with the multiple board system of to-day to which it was shortly changed, its main features together with the reasons for its discontinuance are of interest.

The board was created by act of the legislature at its session in 1870; it was to consist, in addition to the three *ex-officio* members of the State Board of Education, of four men appointed by the governor, two of whom were to be chosen from the counties north of the Missouri River, and two from the counties south of the river, these being the districts proposed for the two schools then projected. In the attempted legislation of 1869 and in the original drafts of 1870, when first six and then four schools were planned, the control contemplated was the same — a board first of fifteen,¹ then of eleven members.² This plan appears to have been persistently adhered to by the promoters of the movement; they evidently thought of the work of these schools as the same throughout; duplication was resorted to for the sake of geographical convenience, but a single aim was to be defined and attained by a single management. With this idea the board located its first two schools, and drew up common courses of study and common regulations for their operation. But serious opposition was aroused in the agitation over location.³ Charges of corruption long hampered the board in its work.

OBJECTIONS TO THE SINGLE BOARD

Aided by such recent experience, southeast Missouri with aggressive sectional zeal brought it about that the school assigned to it in 1873 should be entrusted to a separate board, in which the appointive members should all be local. This wedge afforded a good opening for an attack on the central board. Other districts felt that they might obtain a school more readily if all schools were locally controlled than if they had to deal with a centralized management.⁴ It was the practice at the time to turn over the entire legislative appropriation for an institution to its regents immediately after approval. Communities that had bled themselves to secure their respective schools considered it intolerable that five or ten thousand dollars that would belong eventually to them should be held up for months. As the handling of the money seemed to be clearly theirs, it appeared likewise an infringement of their dignity to have even the educational affairs of the institution controlled from a distance. So firmly fixed was

¹ *House Journal*, 1869, page 256.

² *Ibid.*, 1870, pages 299-301.

³ See page 35.

⁴ This and certain other statements in this section are made on the authority of conversations with persons actively interested in this movement at the time.

this idea of local proprietorship that later, under the new order, the whole board of the Second District School, except the state superintendent, was at first drawn from the one county, three being citizens of Warrensburg. Even the normal school teachers were opposed to the central board, as appears in a resolution of the Kirksville faculty of December 12, 1873.¹

SEPARATE BOARDS — CONTEMPORARY CRITICISM

The old plan gave way in 1874, and was followed by the present system — a board for each school consisting of the state superintendent *ex officio* and six others. These are appointed from the local district by the governor in three classes of two each for six years instead of four as previously; at least one member of the board to be a resident of the county in which the school is located. The extension of term and the elimination of two of the *ex-officio* members — the secretary of state and the attorney-general — were clearly steps in the right direction. An amendment of 1889, by requiring that not more than four regents belong to any one political party, completed the present arrangement. This proviso seems to have done away with the most flagrant political abuses of the new plan; a strong minority of three being usually able to make itself felt.

As to just how the new scheme worked in its early days we have no information except thru cautious public utterances of officials. Two of these are unequivocal enough regarding its educational features, and state admirably the principles which later experience has in general shown to be correct. State Superintendent John Monteith, after seeing the new plan in operation for nearly a year, reports as follows:

“Organization for the conduct and government of the State Normals is yet, as I think, quite far from what it should be. The new law of last winter, in many respects good, does not provide the best system of control. No large school of the class under consideration can prosper, unless at its head is placed an accomplished President, learned, of excellent executive ability, and fitted for his specialty. When such a head is secured the school is better with the least possible outside government. This Director should, to a very large extent, be held responsible for the careful and wise conduct of the school. I am, therefore, opposed to the system of local boards. A general board to supervise the whole system of schools, with executive committees to visit and attend to the business of each individual school, is found by experience to be far better. It is cheaper. It unifies the general features of the schools without impairing their individuality.”²

Monteith's successor, Dr. R. D. Shannon, began his service with 1875. Looking back on his double term of office in 1882, he says:

“By the harmonious coöperation of the boards of regents of the several Normal schools, they have been brought much nearer to a common standard within the last six years. But this is merely a fortuitous circumstance controlled by no influence stronger than the pleasant and agreeable relations between boards sep-

¹ Violette, *op. cit.*, page 198.

² *State Report*, 1874, page 17.

arated by great distance and ignorant both of each other and of the conditions and needs of the schools over which they do not preside. . . . As there can be but one policy upon the part of the State with reference to these institutions, —since the interests of all sections are identical as to education, and demand the same qualifications upon the part of teachers and the same methods of instruction—it would be better to secure perfect uniformity in the courses of instruction and perfect harmony in the management of these schools by placing three of them under a single board.”¹

ATTEMPTS TO UNIFY THE SCHOOLS EDUCATIONALLY

In 1874, in view of the dissolution of the central board that was just then taking place, President Baldwin of Kirksville urged a joint committee of presidents to pass upon applications for graduation,² doubtless with the idea that this would also help to keep the schools together. In his next report he pleads for “unity of plan, harmony of action, and hearty coöperation”³ among all the state institutions. President Cheney of Cape Girardeau, in his report of the same year, put first among his needs “the same course or courses of study for all these schools,” and “the same conditions of graduation in all.”⁴ All these desiderata were secured by Superintendent Shannon thru conference, and for ten years the joint board of presidents that President Baldwin had suggested went from school to school as an effective body for educational control. The result was marked; President Osborne of Warrensburg declared: “The value of these measures in bringing about unity in the normal work can scarcely be overestimated. The tendency of a common course of study towards this end is at once apparent;” and he saw in it a “means of annually comparing results and thus promoting a generous rivalry.”⁵ But a union held only by this voluntary personal tie was bound to dissolve as the individuals changed, and the schools drifted apart. Not until 1899 did they succeed in bringing about another common course of study. In 1904 they united, with important reservations on the part of Kirksville, in essential administrative arrangements, and corrected these again in 1914; the important agreement of 1916 will be mentioned later. These occasional seasons of harmony—all voluntary and occurring only when the situation had become bad—were, however, merely incidents in long periods of marked divergence. In fact, since 1899 attempts to unite on a curriculum have been abandoned entirely, and each institution has been busy following the particular vision of its own leader, who calls the procedure “meeting local conditions,” or “developing the genius of the institution,” or “satisfying the demands of the people,” or “upholding democracy in education,” as the case may be.

PRESENT OPERATION OF THE SEPARATE BOARDS

This review of the early changes in organization and of the fitful and futile efforts of the heads of the institutions to secure united action, at least in their educational

¹ *State Report*, 1882, page xii.

² *Ibid.*, 1874, page 45.

³ *Ibid.*, 1875, page 188.

⁴ *Ibid.*, 1875, page 195.

⁵ *Ibid.*, 1878, page 283.

function, brings us to a general examination of the system as it appears to operate to-day. A careful study of the personnel of the several boards of regents was not made. Present or past members of each board were interviewed, in certain cases repeatedly and at some length. The character of these gentlemen would indicate that, on the whole, the boards have represented a high average of general ability. Some members have served their respective institutions for from twenty to thirty years, the tendency in some places, particularly at Cape Girardeau, being toward rather stable membership. The additions year by year reflect, of course, the qualities of the governor who appoints them, but on the whole it is improbable that this method of selection will anywhere provide a better group of men. The one remediable defect in the present system is the rapidity with which the boards may change, in spite of a six-year term. Owing to death or resignation it has occurred several times recently that three members have changed in a single biennium, and even in the natural course of events a governor who so desires may change four members, or a majority of the board, within his single term of office. Moreover, the elective state superintendent is likely to change within the same period, making an almost complete overturn of the group. When it is remembered that the one condition of the successful operation of a lay board is that the replacements be made slowly enough to enable the head of the school and the older members of the board to educate the newcomers to a sound conception of their duties, it will be seen that changes now come too fast; to say nothing of the unwisdom of having the whole character of the board subject to the ideas of any one governor. The board may and often does come together but once or twice a year, and its opportunity to study the situation may be very slight; one new member in each biennium would allow sufficient elasticity, and would at the same time ensure a stable and as well-informed a membership as the nature of the selections would permit.

FUNCTION OF A BOARD NOT UNDERSTOOD

It is to a lack of knowledge of their duties on the part of board members that many of the internal difficulties of the schools are directly traceable. Most students of education will agree that efficient control of an educational institution involves broadly two kinds of responsibility: first, the care that the concrete processes of education—study and instruction, training and testing—shall go forward with the maximum speed and thoroughness; and second, solely for the sake of the first, that the material means and equipment—buildings, apparatus, and salaries—shall be adequately and economically supplied. A third responsibility, lacking which the other two may be met in vain, is not so generally discerned, namely, that the aim of the institution shall be continually reconsidered in the light of changing situations and promptly and wisely readjusted. Under modern conditions all of these obligations are tasks for well-trained men giving their entire time to their work, if the business of preparing teachers is to be prosecuted with success equal to that even of a modern manufacturing concern.

WHAT IS THE FUNCTION OF A BOARD OF REGENTS?

What, then, is the function of the regents? By good fortune the field work of this study was begun with the school at Maryville at a meeting with the board of regents of that institution, where the impression, subsequently confirmed by the head of the school, was gained that almost ideal conditions existed between school and board. A perusal of the state reports later revealed a letter from the president of this board—then president of the local school board—giving his views as to the function of a school board. We cannot do better than quote this in part:

“Upon one side is democracy represented by the Board of Education, and upon the other a cultured institution. Between the two as an intermediary is the superintendent. The relation of the board to the community is somewhat analogous to that of the superintendent to the board. While some of the duties of the board are fixed by legal enactment, many of them are by implication. It is its duty to look after the highest welfare of the institution intrusted to its care. It is also its duty to lead the community to recognize what is best in education. As the Board represents a culture higher than the general culture of the community, and as its closer relations with the school and supervising officers give to it a wider and better view than the views of the community, the work of the Board becomes directly educative, and its duty, manifestly, is to inform and direct the community. . . . It [the Board] is a non-professional organization with work to be done requiring very high professional wisdom and skill. The whole complex organization of the school and its work in detail may come within the scope of its official observations, but at the suggestion and under the direction of the superintendent. He becomes for it the measure of its efficient service. It should exact of him the greatest vigilance and the most painstaking accuracy, and it has a right to expect of him candor and frankness. Upon the other hand it should be guided by his wisdom and influenced by his recommendations, and it must honor him with its confidence and loyalty.”¹

If these principles hold of a municipal school system, they should be doubly sacred in a higher professional institution. The all-important business of a board is to keep a first-class executive at the head, and then the less government the better, as Superintendent Monteith said forty years ago. Many normal school regents in Missouri apparently fail to discover this, and exceedingly few realize it at the time of their appointment. To the excellent and devoted men who have seen clearly, who have spent their best energies in securing a thoroughly trained, experienced, and able man, and have then buttressed his efforts both in school and community with an eye solely to the success of the school, are due the good results already achieved. But the labor of dealing successfully with those gentlemen who either from ignorance or self-interest do not have this point of view is out of all proportion to the results. Not understanding the true relation it irks them to be, as they say, “a mere rubber stamp”—a feeling that does credit to their conscience if not to their intelligence. They have been appointed; they must justify that appointment by action; and the action taken usually

¹ *State Report*, 1904, page 55.

tries the nerve of the president and his readiness to sacrifice everything for his professional integrity. If he stands the test, the fight is usually won; if he yields, however little, to what he knows to be professionally wrong, he is the tool and toy of that board thereafter. For the sake of the school such a test of real presidential timber would not be a bad thing, if boards would only drop the timid and reward the brave; but that is not their way. Even at Maryville, at the time of organization, the first board, and not the president, selected the school's first faculty regardless of professional considerations; the strategic importance of a teacher in the new district or his personal relationship seems to have played the important rôle. In another school, much more recently, the leading member of the faculty, next to the president, was ousted in spite of the protest of the president's renewed nomination—and the president remained! Two of the boards have recently elected members of their own body to positions of profit in the schools without the consent of the presidents concerned, and by one of them a field agent with whom the president cannot coöperate has been maintained upon the payroll for years in face of the president's direct opposition. The latter board will not only make appointments distasteful to the president, but will invite and encourage direct dealings with faculty members, especially with such as are willing to use this method of raising their salaries, and at its annual meeting will determine the whole faculty schedule, ignoring the president and reëlecting him last. So far as appeared, the school at Cape Girardeau has been free from mismanagement of this sort.

Even when board members will not openly oppose the prerogative of the educational head in planning the efficiency of his institution, there is a subtler pressure which the bravest executive resists with difficulty, namely, the tendency to shape nominations and proposals partly to suit the known preferences of the board when these are made apparent. A board that cannot abstain from such expression and that neglects to reinforce not only a president's right but his complete responsibility for the personnel of his corps, runs great risk of leading him to sacrifice excellence in a well-meant desire for "harmony."

PARTY POLITICS IN THE BOARDS

However ridden with school politics certain of the normal schools appear to have been, and to be, there apparently has been, until very recently, a marked freedom from party politics in the operations of the boards. A vain effort from high party authorities to foist off on a courageous president a "lame" party politician as a teacher discloses an always latent tendency; in this case the board seems to have loyally protected its leader from punishment. Still more instructive and deplorable from every point of view was the recent apparent attempt to pay a political debt with the presidency of the school at Warrensburg. The proposed beneficiary, a personally attractive and capable gentleman and an active party worker possessing strong political connections, was a man with but a fragment of even a college education, and without administrative

training or experience that would qualify him for such a post. A vacancy was created by dropping a man of the opposite party who for nine years had served the school, and under whose charge it had enjoyed extraordinary growth and prosperity. From all that could be learned, furthermore, this was accomplished without the faintest pretence at basing the procedure on educational or professional grounds. With plans well laid the board proceeded to the election of a new president, but the alumni were so aroused, and the upheaval among the teachers of the school became so threatening at the prospect of a leader inferior in training and experience to most of themselves, not to mention the grossness of the political barter involved, that the board's courage weakened. Fortunately the minority nominee was a choice on which it would have been difficult to improve—a man with collegiate and graduate preparation and a conspicuously successful experience of some length at the Warrensburg school; on him the board finally united. It is little short of a disaster when for any reason an educational institution falls into the hands of a person not qualified to direct it. This was happily prevented at Warrensburg. It is, however, a moral disaster complete and overwhelming when seven trustees of an institution, or a majority of them, prove false to their official duty on the occasion which is the chief reason for their existence as trustees. Such a calamity the outcome can scarcely be said to have averted.

WEAKNESS OF THE BOARDS IN MATERIAL AS WELL AS IN EDUCATIONAL PROBLEMS

The boards do their best work in handling the questions of the second group cited above, namely, those growing out of the material equipment and financial maintenance of the institution. Here the criticism of experienced and successful laymen is of great value, but may be overdone, as is proved in the case where a much needed increase in salaries—the paramount consideration of a good school—was held up for years by an active regent, who could see only the need for an enlarged equipment and campus improvement. Under this head falls also the paralyzing practice alleged and apparently true, of some boards, of judging the worth of a teacher, and his consequent differential treatment in salary, on the basis of the number of students that he can enroll in his classes. Again, Missouri boards have been known to erect buildings and to exclude the head of the school from even an advisory participation in planning the structure he is to use. In all these situations the educational consideration should obviously come first, and the judgment of those men who are trained and paid to know should prevail.

In the important responsibilities of the third class mentioned—those of studying and redefining the aim of the school—the board of regents is naturally helpless. Not only is the average local regent incapable, thru lack of data, of judging what the exact aim and scope of the school should be; he is predisposed thru his local and sectional sympathies to favor any and all developments of the institution that will serve a purely local or sectional end. If it is proposed to have a college instead of a normal school, he is in favor of it, of course; shall an agricultural and commercial

trade school be added, he sees great advantages; shall courses for new types of teachers be advertised, he agrees at once, if the new departure will enroll more students. The problems involved are highly technical, and he is perforce at the mercy of his chief educational adviser. Here any energetic and plausible president can work his will, especially if he can show—a matter of deplorable facility—that “it won’t cost much, if any, more.”

LACK OF UNITY IN POLICIES AFFECTING THE WHOLE STATE

The system bears its full fruit when it becomes, as in Missouri, a question not of a single institution, but of a series of institutions established for one well-understood purpose—to provide a good teacher for every school position in the state. Here are five schools with independent local boards as described above, and a sixth, the university, having a general board representing the entire state. All are preparing teachers, and all are supported by state taxation. The state has a maximum need which all the schools together, with the most complete coöperation, could scarcely meet, yet no means exists of coördinating the efforts made by each in a practical solution of the common problem. In the five normal schools it was probably intended that the state superintendent should be the unifying factor common to all boards. This officer, however, is himself elective and without much authority. He is a convenient counselor to the presidents and occasionally to the boards, but as related to the latter, his position, in the opinion of at least two recent incumbents of the office, is isolated and relatively without influence. If he were himself a trained and responsible appointive officer, and if then normal school boards could elect their presidents only on his nomination, and change their curricula only with his approval, he could do the state a great service thru his grasp of its problem as a whole.

EACH SCHOOL A LAW UNTO ITSELF

In the absence of any coördinating authority, each school moves solely in its own interest. Its winnings from the legislature are in fairly direct proportion to the political influence exerted by the president or board members. Activity of this sort is incessant and skilfully directed, but that educational considerations play but a minor rôle in the apportionments is evident from the striking inequalities that exist. While the school at Cape Girardeau is luxuriously housed in a fine plant including four school buildings and two dormitories, Springfield, with an annual enrolment of several hundred more students, has been obliged to endure years of excessive crowding in the single structure with which it started. It is a situation true to type, for in 1896 the same institution at Cape Girardeau, with an annual enrolment then of three hundred and ten, secured an appropriation for building four separate halls for the exclusive use of as many literary societies, when the school at Warrensburg, enrolling annually over nine hundred students, was unable to secure money enough to pay its teachers. A system that admits of such extremes is bad; the state is merely doling out funds in the

dark where the personal or sectional pressure is greatest, and must continue to do so until it concludes to entrust its biennial offering for the training of teachers to a single, central board competent to make a rational distribution on the basis of proved educational requirements.

EDUCATIONAL DIVERSITY OF THE INSTITUTIONS

In their educational aspects the five schools are as diversified as tho they were in separate states. They are all dealing with the same kind of student for the same final purpose in the same state community, yet their terminology, their standards of value, and their methods of educational bookkeeping are quite unlike; and the content of their curricula, their graduation requirements, and their organization of fundamental features are widely divergent, the practice in each school expressing either the inherited tradition or the will of the present head, modified in some schools to an extent by the action of the faculty. Nevertheless, they cannot escape one another. When a student offers himself to all in turn, indicating that he may be had by the highest bidder for the uncertain credentials he has to offer, the losers naturally suspect the winner. Three schools told of losing students to other schools where graduation was effected with unexpected speed. One institution offered flatly in its catalogue to meet "whatever favors either of the other schools will grant and no more." In the matter of entrance requirements this independent attitude has had noticeably bad effect. In 1904 two of the schools desired to standardize terms of admission by accepting on certificate only students from approved high schools and taking others on examination. The third preferred to take in all alike and "prove them up," that is, admit them to class and throw responsibility on a teacher anxious to increase his enrolment. Thus the first two were virtually compelled to adopt that method or suffer the consequences, and the high schools were denied this much needed support by the institutions that should have done most to strengthen them.

LOSS TO THE SCHOOLS OF CRITICAL REVISION

This interplay of uncertain relations is not the major defect. The real weakness in the situation is the loss to each institution of the tonic effect that would follow were it obliged to keep its practice overhauled under the critical eyes of competent outsiders either from other schools or from the state department. Such criticism would require it to bring its methods up to a well-thought-out standard agreed upon for all. There are such standards in all the matters above mentioned, some of which are found exemplified at each school, but they are checked and often neutralized either by the bad institutional habits of earlier years, or by the radical, undigested innovations introduced on the spur of the moment thru the system of one-man control. It is unthinkable that a modern corporation, doing in each of five Missouri towns a business requiring from five hundred to one thousand employees in each plant, would tolerate the meaningless and arbitrary variety in methods directed at identical ends that presents itself

in these five normal schools. Some years ago, to terminate the existing chaos, the state inaugurated in each school a standard system of financial accounting and stopped there. Meanwhile, the vastly more important interest, that for which the schools exist and for which they should be held most strictly to account, namely, their educational procedure, goes without scrutiny, check, or control of any sort save by the one man whose apparent success and public recognition have no relation, direct or indirect, to the proved excellence of his work. In the name of "liberty" the real emphasis is placed on "difference;" whereas in all other processes, the effective procedure is first to agree on the best way the thing is to be done, and then put the emphasis squarely on the quality of the work. Under the present system of local boards such coöperation is impracticable.

THE NORMAL SCHOOLS *versus* THE STATE UNIVERSITY

The absence of material and educational coördination of the normal schools among themselves is thus a serious and expensive defect. These same disadvantages are accentuated, however, in the active friction and lack of adjustment between the five normal schools on the one hand and the state university on the other. The normal schools, altho virtually identical in scope, are relatively non-competitive by reason of their districting. The state's one great centre of higher education, on the other hand, almost from its inception, has exercised the function of preparing teachers—for years many elementary, of late mostly high school teachers and administrative officers. Between these two institutional groups competition is inevitable unless forestalled either by an adequate controlling organization or by voluntary coördination on the part of the responsible educational leaders. The former does not exist; the latter failed up to 1916. Even under the *entente* then arranged it exists only in minor tho important respects; in all matters affecting the field or scope of operations the traditional autonomy prevails. In the cases of at least two normal schools this autonomy means frank competition with the university—competition first in filling positions in high schools, and second in securing the attendance of students for a four-year college course. Offering as they have elaborate elective programs of a general character, the schools at both Kirksville and Cape Girardeau must naturally exert themselves to fill the high school vacancies in their respective districts to the exclusion of students from the university, and can hardly see without regret the attendance at the university of students who might be taking college work with them. The school at Warrensburg, altho it has prepared a larger number of high school teachers than either of the other two, has not so clearly assumed this attitude; while Springfield and Maryville have until recently devoted themselves to the supply of elementary teachers. With due growth in size or a slight shift in personal relations, however, there is no reason to expect that these schools also will not aggressively press their claims to the high school positions within their districts.

SOURCES OF RIVALRY

This competition is the logical outcome of the historical development traced elsewhere.¹ The university, preparing the teachers for the largest and strongest high schools and standardizing the conditions surrounding them, has projected its influence steadily deeper; the normal school, training the teachers in the smaller high schools, has as steadily strengthened its courses for this purpose as small high schools have multiplied, and its influence has mounted with their growth. At last the two forces have met, and the problem of their mutual adjustment is as yet unsolved.²

One of the university's most effective aids in developing its tributary high schools has been its high school inspector. For the admission of its graduates to the university without examination, the approved high school has been obliged to satisfy a constantly increasing list of requirements in all points affecting its efficiency, including the training of its teachers. This has been an incalculable benefit to every high school community—a benefit difficult of attainment by any other method: yet the operations of this inspector easily become the object of suspicion by the normal schools that are desirous of placing their graduates in positions that he inspects. Where there is strong difference of opinion as to what constitutes satisfactory training, such as has long existed between the university and some of the normal schools, serious conflict may and does arise out of a perfectly sincere attitude on both sides. To represent their special interests the normal schools have had recourse to a "field agent," either to serve expressly as a drummer for students and positions, or to unite that function with certain more dignified extension duties. One of these officers professes to know intuitively which youth belongs in the university and which in the normal school, and to act accordingly, but promoters cannot always be counted upon to decide infallibly in such matters. Aside from these official representatives, the instructors and officers in all institutions acting as lecturers, commencement speakers, and so forth, conduct an indirect and, in itself, doubtless wholesome propaganda; but to have these educational servants of the state working at cross purposes in pressing the claims of one institution rather than another—both state supported—is bewildering and unfair to the student as well as wasteful to the state and hurtful to its real educational interests.

With one notable exception the official literature of the six institutions appears to have been restrained and considerate in tone. The publications of the school at Kirksville, altho intended for the use of students, have been consistently devoted to partisan efforts. The alleged virtues and achievements of this particular school have been glowingly set forth, with attacks and reflections both direct and indirect upon another state institution. Competition for high school students and positions is conceived to be the normal condition: "If the universities should gain control of the high schools, then the so-called small colleges, the normal schools, and the various inde-

¹ See pages 85-87.

² See pages 89-98.

pendent technical schools would cease to have the means of competition, and the universities would be all-powerful.”¹

It might reasonably be expected that sincere efforts for educational readjustment would be taken to the proper agency, the legislature, without seeking to prejudice students by polemics against a sister school. Such competitive exploitation should be impossible, and would be were all institutions subject to review and coordination by a single authority.

EFFECTS OF INSTITUTIONAL COMPETITION

Outside of the institutions themselves, educational and other interests in the state at large are influenced to no slight extent by sympathy with one party or the other. Certain towns are practically closed to one school or another because of a superintendent drawn from an opposing institution; influential school board members, biased by trivial personal attachments — a child who has attended, a good speech, or a favor done by a representative — direct the patronage regardless of the merits of the applicants. The state superintendent of public schools, an officer who should make effective disposal of all the educational energies in the state, necessarily becomes more or less partisan. If, as in several recent cases, he be a man without college or university training, he feels himself largely out of sympathy with these higher institutions; if, on the other hand, he be a university man without normal school experience, he and his office are likely to be distrusted by the institutions with which he has most to do. Theoretically he is a Republican or a Democrat; actually he is pro-university or pro-normal school, or so considered; to control the superintendency is therefore worth the effort of both sides.

Under present conditions it is to the interest of each and every institution to push its claims before the legislature; this results in the maintenance of a sort of legislative lobby. It is not a long step from the legitimate presentation of the needs of an institution to the “log rolling” that bases success on efforts of quite another nature, and it is declared by competent observers that the tendency to take this step is already strong in Missouri. To what extent this is true it is difficult to say, but with two sets of institutions sharply and increasingly competitive in an important field, there is the prospect that, as in some other states, the people and their representatives will gradually segregate into “pro-university” and “pro-normal school” groups, and that other legislation will be affected or determined by this division.

THE LOCAL BOARD SYSTEM RESPONSIBLE

It is hardly necessary to point out that the conditions and tendencies noted above are unwholesome, and that they are plainly traceable to the present system of independent local boards. To sum up the defects of these boards it may be said: (1) that in practice, if not in theory, they may, and frequently do, change too rapidly; (2) that

¹ *Bulletin* (Supplementary), *Kirksville*, September, 1907, page 1.

owing to ignorance of their true duties their members almost inevitably interfere, to the injury of the institutions, in matters that the state has assigned to its paid experts; (3) that where their members do not thus interfere, their duties are so nominal as not to interest men of the highest ability and public standing; (4) that for political considerations they are capable of disregarding their educational obligations; (5) that lacking a competent and convincing educational adviser who has the good of the whole state in view, they may easily ignore the local head of an institution and make serious mistakes, or yet more easily be induced by an enthusiastic president to follow a course that is either futile or detrimental to the state as a whole; (6) that the system breaks down completely when it is desired to coördinate the work of several institutions according to one consistent policy. This is shown in irrational appropriations, in pointless and wasteful divergences in practice, in the introduction, by irresponsible officers, of arbitrary innovations directly affecting other schools, and in the destructive rivalry that wastes both funds and energy, bewilders the student, breeds friction among public schools and their officers, and injects wholly unnecessary partisanship into legislative discussion. In short, under such conditions, education becomes not a matter of statesmanship but of politics.

On the other hand, the best that can be said in defence of the local boards is inconclusive. It is urged that by this system more men are kept actively interested in the schools than the few who might constitute the central authority in some other plan. This is not necessarily true, for local committees, made up of women as well as men, could be designated for the advisory inspection and genuine promotion of the school in the community without investing them with power to maintain an irritating and useless interference or allowing them by their very existence to block the realization of a sound policy for the whole state. Beyond this there is little to urge. Poor as the system is in general, and bad as it is in some particular spots, the main fault lies in its weakness. When established it was regarded by the best contemporary opinion as much less effective than the centralized system that it displaced, and the experience of forty years and of other states has amply borne out the earlier judgment.

B. PROPOSALS FOR A BETTER ORGANIZATION OF PROFESSIONAL TRAINING FOR TEACHERS

How can Missouri most profitably administer the preparation of her teachers?

This is an important and difficult question: important because there is much at stake; difficult because changed conditions everywhere demand a fresh answer for which no American state has as yet worked out a wholly satisfactory precedent. From a material, social, and intellectual standpoint, Missouri has been transformed in fifty years; her needs to-day are radically different from those that dominated her reorganization after the Civil War. Her possibilities are measured, furthermore, not merely by the best that any other commonwealth possesses, but by the degree of skill with

which the lessons learned elsewhere can be turned to account. A state should by all means move cautiously and surely in new educational adjustments; but every progressive community must expect sometimes to lead the way in making trial of promising means of advancement.

PREPARATION OF TEACHERS A HOMOGENEOUS UNDERTAKING

A completely serviceable administration of the preparation of teachers in Missouri probably cannot be attained without reorganization. We have seen how the existing institutions were set up independently. Proceeding from small, tho for the time adequate beginnings, they have grown with the people's growth, and now hamper one another by their unrelated efforts. The present need is to coördinate and blend them into a single, powerful, and smoothly working instrument for the great service that they are expected to perform. Leaving the two great cities out of account, it may be said that, at present, the state is preparing its teachers thru seven unrelated, tax-supported agencies. The university, under a board of curators, has prepared or shared the preparation of many instructors for the strongest and largest high schools. The five normal schools, under their several local boards, have prepared or shared the preparation of about half of the high school teachers, especially for the small schools, and two-thirds of the elementary teachers in graded schools; they have also exerted more or less influence over nearly half of the vast mass of rural school teachers. The high school training classes, under the control of the state superintendent, are supposed to prepare exclusively for the rural schools, but have not been carefully regulated for that purpose. There can be no reasonable question that better results than are now accomplished under these several managements could be secured under one control. To educate teachers for the public schools is essentially one homogeneous task, and in communities as great and as closely knit as a modern state like Missouri, this function could profitably be unified in expert hands.

A REORGANIZED UNIVERSITY

The main question is, of course, the relation between such a unified system and the present institutions. In Missouri the answer to this question is greatly facilitated by the nature of the situation. The five normal schools are similar institutions of like aims and traditions, and are well distributed over the state. They are at present offering a great variety of elective curricula, but all include the four-year curriculum parallel with the regular four-year curriculum at the university; none has attempted to give graduate courses. In spite of the considerable amount of secondary work now required of them, it is obvious that in the broadest sense these professional training schools, hitherto by accident described as "normal schools," are already, in spirit and purpose, essentially a part of that equipment for higher and professional education that constitutes a university, whether so organized or not. There are excellent reasons why it would be wise to recognize and confirm this fact by incorpo-

rating the present normal schools together with the university school of education as a state Division of Education fully organized and equipped to provide for all phases of the professional training of teachers for the public schools of the state. The normal schools would thus become State Colleges of Education within the university and subject to the same consideration as any other branches of that institution.

Longer to maintain the distinction between the university and the normal school as representing a distinguishable difference in grade or quality of instruction is, in the cases of the best normal schools in this country, purely factitious; and its eradication would be the best possible reason for requiring of inferior schools a genuine enforcement of the standards to which most of them now profess their adherence. In the numerous American normal schools now doing thoroughly standard work, the instructors have as broad and as intensive training as those giving instruction to students of equal advancement in good colleges and universities, and are quite frequently superior in this respect. In the content of instruction the normal school provides a specialized professional organization of material that in its field is as significant technically as any work in medicine or law. The teaching in first class normal schools is probably in advance of that to be found in the ordinary arts colleges or even in the better medical and law schools. Both institutions use the same tools—books, both for text and reference, laboratories, and collections—frequently making them for each other; both seek the same scientific standards of achievement; both conduct original enquiries and “surveys,” tho in the university this latter purpose necessarily stands forth more clearly. Furthermore, the interchange of personnel is constant: students in large numbers proceed from the normal schools to the universities, not for different, but primarily for more advanced work than the former are able to offer; on the other hand, students from the universities, or those who have had both types of training, return to the normal school as instructors, bringing the ways and ideals of the university with them. For twenty years the two institutions have been more and more acutely conscious of each other as they have moved in converging lines to the same goal: the normal school proving to the university the vitality and efficacy of a central professional purpose in preparing teachers, the university serving the normal school as a steady and beneficent critic while profiting by its progress. The normal schools represent the only type of higher professional education not yet formally included in the university group. Fusion of the two in one organization is reasonable, and would manifestly promote the fundamental integrity of the state’s educational life.

A PROFESSIONAL BOARD OF EXECUTIVES

The plan suggested would at once make it possible to consolidate all of the state’s teacher-training agencies under one educational direction, as well as under a single formal government. With this in view the affairs of these five colleges, together with the university school of education, should be placed under the direction of a new board consisting of the heads of these six units, with whom should sit also the presi-

dent or chancellor of the university and the state superintendent of public schools. This board would constitute not merely the responsible authority for the management of certain institutions, it would be a board of expert men in complete charge of the preparation and supply of all teachers for the state, and the regulation of such lateral interests as the high school training classes in their professional aspects should be under its control. Its decisions would be reported to the board of curators of the university for approval, and might of course be vetoed by it. Such action, however, would certainly be rare; the habit of a competent group would be to study a measure with such thoroughness as to admit of but one conclusion before seeking final approval thereon.

A board for the purposes here indicated should be ensured the power, the responsibility, and the necessary procedure for reaching reliable results. It should nominate the personnel of instruction and administration, including the presidents and dean, in the component colleges and school of education. It should propose policies and regulations for administrative action. With the assistance of the state department of education it should study unremittingly the dimensions and character of its problem in the number and kind of teachers needed in the state. In coöperation with the several faculties, and with their approval, it should work out and revise curricula to meet these needs. It should consider and propose the creation or adaptation of material facilities with the single purpose of solving in the best possible fashion for the state the problem of teacher supply. The expert character of its members, and their relief from local and political demands, their opportunities for securing abundant accurate information, the elimination of competition, and the requirement of frequent (at least monthly) sessions for careful discussion and planning would go far toward an assurance that the ultimate solution of their problem would be correct.

EFFECTS OF PROPOSED REORGANIZATION

The form of organization here described has certain suggestive implications:

(1) The heads of the several institutions, coöperating as executives of their respective colleges under the new plan, instead of being semi-political promoters with attention divided between the local board and the legislature, would become strictly educational officers concerned solely with their individual institutions as carrying out a definite state policy framed by them and for which they were responsible. Their tenure would be permanent and secure instead of biennial and precarious as now; their power in the state would be greater and their judgment surer because of constant mutual criticism and support; the position would be attractive to trained students of education and to men of first-rate ability.

(2) The teachers in the present normal schools would at once acquire full collegiate or university status; salaries, hours of work, and pension privileges, as well as qualifications of training and experience, would be regulated for all alike; there would be but one fraternity of state-employed servants in higher education. The students like-

wise would be relieved of invidious distinctions, both actual and alleged, between themselves and regular college or university students. In the interests of solidarity in higher education the university could well afford to welcome the alumni of the normal schools to such standing as their varying attainments might justify.

(3) Administrative differences would immediately disappear in favor of one thoroughly studied procedure worked out and applied in joint consultation. Admissions could be handled from one central office, possibly that of the state superintendent, thus securing a just and uniform treatment of credentials. A common terminology, a uniform grading and credit system, would convince both teacher and pupil that he was not a victim of local idiosyncrasy, but had received standard treatment, open to objection possibly on its merits but applied to all alike.

(4) The curricula would be unified and harmonized, and their administration placed on a rational basis. Since all schools and teachers would be of equal standing, it would make no more difference whether a certain curriculum for kindergartners or for high school teachers were given at one college or another, than it would if they were given in different buildings on the same campus. Such matters would be determined on the merits of local need and availability in view of all considerations and without institutional prejudice or jealousy. A large financial saving would certainly accrue at this point. Great advantage for the curriculum would result, too, from the increased flexibility of the staff of instruction. With intimate association of all colleges in the university, instructors could readily be assigned from one to another for special courses or lectures, thus utilizing fully each teacher's best powers. Teachers in other departments of the university would be available for the same purpose. Again, with associated administration, the school of education, which would doubtless develop primarily as a research or graduate school, would be in an admirable, in fact the only logical position to assist and be aided by the various enquiries undertaken at the five collegiate centres. Instructors in the colleges would then be in close and continual contact with this work of the graduate school, where they could perfect their training or coöperate on special problems.

(5) Outside of the institutions, the chief effect of the proposed plan would be to relieve the state of the element that most disturbs and confuses its representatives in providing for higher education. At present each separate school demands all that it dares, in the hope of finally obtaining enough to allow it to operate and expand. Budgets are made out not on educational grounds, but with an eye to institutional success, and the arbiter as to what these various interests—some genuine, some fanciful, some real but inflated—shall receive, is a legislative committee of laymen wholly uninformed except by the glowing advice of the interested local board members and presidents.¹ By the proposed plan the budget for the training of teachers would be fully worked out jointly in the board of presidents; the chancellor and the board of

¹ A representative of the enquiry was present at one visit of the state junketing committee. Surrounded by members of the local board of regents and by school officers, these gentlemen went thru buildings and grounds, made speeches at the student assembly, and were very uneconomically entertained by the home economics department

curators would be responsible for its suitable incorporation in the budget of the university, and the proposals for financing the state's higher education would come as a logical whole before the state's government. With its support merged thus in the general budget, the normal school would find immediate relief from the pressure for numbers that now exercises such a baneful influence over its educational policies. Appropriations could be unspecified as to their detailed application, which would be subject to the discretion of the board of executives. It would be possible, for example, by economies in other quarters, for a central control to relieve the pressure of numbers at Springfield even on a reduced total appropriation. Such an administration would convince the state that within the general scope of its desires, its funds were being wisely distributed by those who were engaged because they knew best how to do it.

(6) To the state at large the benefit of having a single unified scheme of higher education would be manifold. The student fresh from high school and anxious about his future would receive consistent and unbiased advice at any institution and in all of the state's official educational literature, as to where he could best go for what he needed. Instead of being lured by personal and printed eulogies to help swell the roll of this or that school, he would be told candidly what each school was equipped to give him, and would be urged to get the best either within or without the state. Each school would be a stronger institution. When confronted with the alternatives, the people of Missouri prefer teachers prepared by institutions that ensure nationally recognized standards of excellence to schools that may be swayed this way and that by local pressure, and that remain provincial because they lack the detached point of view that enables them to lead their communities. Furthermore, the popular effect of an orderly, harmonious scheme of education is superior to that resulting from institutional strife. Missouri has already seen partisans of the university and partisans of the normal schools lined up in opposition on questions that were not issues between the schools. This tendency is likely to increase as the normal schools grow into more and more effective rivals of the university, until wholly irrelevant decisions will be reached according as the "university vote" or the "normal school vote" can be more effectively marshaled. This outcome ought to be avoided.

(7) It is worth noting, finally, that an organization in Missouri of the nature above described, if carried thru fully and in good faith, would mark a new epoch in American institutional life in this field. It would serve to seal the fast-closing breach between two groups of institutions that have stood aloof in feud-like attitude for many years. Not all states, to be sure, are in a position to bring about such a change. States in which the normal schools are, and must long remain, chiefly secondary institutions would scarcely come within the scope of this plan. States having no state university would be confined to organizing their training agencies in a single pro-

on which the schools lean heavily in such events. An agreeable understanding with the legislature was no doubt promoted, but as a means for determining the character of the school and its operations with a view to support, the occasion is, of course, quite absurd.

fessional group. But where there exist side by side a state university and one or more professional institutions of collegiate grade, all devoted to the same purpose, there would seem to be little question of the wisdom of incorporating all units that are functionally similar into one organic whole in so far as their direction and control are concerned.

The one "insuperable" objection to the proposal that has been made by normal school men is that "the university would swallow up the normal schools;" on the other hand, the friends of the university regard the plan as impracticable because "the normal schools would swallow up the university." To an outside observer it would appear to be much to the advantage of the state were this mutual repast to take place as soon as possible; whatever may result from the process should then devote its undistracted attention to giving Missouri an adequate supply of first class teachers. One normal school head agreed that the plan was excellent, but thought it could not be carried out without a completely new set of normal school presidents. If the plan is excellent and if this opinion is true, comment is unnecessary.

THE CITY TRAINING SCHOOLS SHOULD BE INCLUDED

It has been a question up to this point of establishing a vigorous unity of movement and purpose for the six state institutions—the five normal schools and the university. The reorganization should not stop there. Missouri is peculiar in that a predominantly rural population is sealed up behind two great municipal gateways of national importance. Between these cities and the state the interests and obligations are mutual; they are parts one of another, and every important policy of either should aim to recognize and intensify rather than weaken this solidarity.

In the work of education the one feature that may properly assume paramount importance in thus binding city and country together, the one responsibility which the state should reserve consistently and universally to herself, is the teacher. Local expenditure for supplies and equipment may vary within limits, but the animating spirit of the state's educational system, be it rural, or municipal, or metropolitan, should be one and the same. Practically considered, it is a somewhat remote ideal that the district school teacher in an obscure village should possess the same training as the teacher in the well-developed schools at St. Louis. Nevertheless, that is the ideal of American democratic education, and the avenue to its ultimate attainment is plain enough: *Generous state expenditures for better teaching, and state control of all state moneys so expended.* While the state has been slowly building up its conviction in favor of a policy of normal school support, St. Louis was compelled to embark alone upon her own program of intensive training. Now, however, the state is fully committed; she desires the best possible training for her teachers everywhere. And in the reorganization of her facilities for this purpose, a reorganization that cannot be long postponed, the support and control of ample training facilities for her cities should be willingly assumed. There can be little question that in this respect the legislation

of 1915 was a mistake. Here for the first time the state turned over to St. Louis and to Kansas City considerable appropriations for local training of teachers, and abandoned all right of control and supervision as to how the money should be spent. The inrooting of such a policy means the perpetuation of these two great centres as virtual islands in the educational life of the state. In the commonwealth of ideas these two cities propose henceforth increasingly to walk apart and therefore aloof from the state at large. This would be a misfortune, and the way to avoid it is for the state to guarantee on its own account teachers that shall be completely satisfactory to the cities. The claim of the cities is just—the state owes them funds for this purpose; but with these funds to allow the cities to wall themselves off intellectually is utterly indefensible, and to train up for themselves alone a closed and locally privileged class of teachers has just this effect.

If the State of Missouri were to own and control as part of her training system a first class four-year college for teachers in St. Louis, drawing students chiefly from St. Louis, but accessible on equal terms from the state at large, and sending graduates both to city and town, the immediate reaction throughout the other state schools would alone be worth the cost. On the other hand, there is no reason why such a school, operating in close sympathy with the local school authorities, should not be fully as effective as the present institution controlled wholly by the city. As a constituent unit in a Division of Education of the state university, suggested above, such a school would virtually set the pace, and would constantly and powerfully influence education all over the state. It is true, of course, that on the part of the city a certain intimate sense of proprietorship in its local training agency would be missed. This would be more than offset, however, by the soundness of a situation that conceives the people of the state to be essentially one, and that, while providing effectively for local demands, holds each part responsible for promoting the general movement forward. For these reasons a state-supported college in St. Louis, and possibly another in Kansas City, should be included in the proposed university system, having their directors members of the board of administration and coördinate with the heads of the other state colleges of education.

VOLUNTARY COÖPERATION

Pending a complete readjustment of relations, an existing movement toward voluntary coöperation demands more than passing attention. The story of earlier attempts on the part of the state normal schools to act in unison has already been told.¹ The lack of any real inducement for these combinations, aside from personal sanction, seems to have brought them successively to naught. Since the inauguration of the present study, however, a plan of coöperation has been worked out that includes a new factor, the university, and embraces two features that contribute elements of possible permanence. First, the plan contemplates exchange of credit between all state insti-

¹ See page 44.

tutions which satisfy certain fully defined standards. This relation with the university is new, and will undoubtedly add force and incentive to the arrangement. The other significant feature of the plan is a committee of visitation and inspection selected annually, one member appointed from the state department to be chairman; a second, selected by the faculty of the university, and a third, by the faculty of a normal school—the last representing the schools in rotation. It should be noted that these last two members represent not the presidents but the faculties of the respective institutions. The duty of the committee is to report on each institution's adherence to the proposed standards, presumably after sufficient investigation. The standards set forth in the agreement deal with terms of admission, advanced standing, records, and credit; the preparation and teaching load of instructors; program hours, certificates, and degrees of students; and terminology of courses.

This agreement among the schools is thoroughly admirable as far as it goes. There is danger lest the committee prove either too inquisitive to commend itself to all of the institutions, or too tender hearted to accomplish its purpose; with tact and judgment it should be able to smooth out differences and pave the way for mutual confidence in so far as this depends upon correct administration in such details. It would be a pity, however, if the real significance of the movement did not go beyond this. The responsible heads of the state's training schools have here united in a permanent conference group to have definite and frequent meetings, where matters of importance will be discussed. Their union has been voluntary and uninfluenced by any outside dictation. There is an excellent opportunity, under such circumstances, for officials more interested in the state than in their respective personal fortunes to proceed from minor matters to the real problems that confront them: the actual demand for their product, the scope and possible differentiation of their respective efforts, the quality and value of their curricula, and so forth. Thru the development of this conference group the state might evolve a board of expert leaders in this all-important function—a permanent "general staff" committed to persistent discussion and sifting of these larger problems until the right solution should be found. In that case no institution would feel justified in taking an important step without the approval of this group; and the education of the state's most important professional class would be conducted with harmony and clear purpose on a high level. In such an event Missouri would establish a most notable precedent for coöperation. The success of the movement would, of course, be immensely facilitated by bringing all the normal schools legally into the organization of the university—a step that could be taken by statute without disturbing the impregnable rock of the Missouri constitution; but much can be done even without this very desirable change, as the unanimous verdict of such a body of educational leaders would probably carry great weight with any local authority. There is every reason why the state, unless prepared for radical action, should allow the new movement time in which to bear its full fruit, in the hope that this possible larger outcome may be realized.

C. REORGANIZATION OF STATE EDUCATIONAL CONTROL

The merits of various types of state administration in educational affairs are not the main subject of this study. A well-conducted state department is, nevertheless, of such capital importance to a successful management of teacher preparation and supply that a brief consideration cannot well be avoided.

PRINCIPLE OF CENTRALIZATION

Whatever steps may be taken in Missouri or elsewhere in the name of progress in educational organization, it is safe to say that they will represent in some form the present inevitable tendency toward simplification, by centralizing power and responsibility in the hands of a few individuals—and these fitted to use it. Most of the notable gains in educational administration during the past quarter century have been of this nature. They have come first in cities where the problem could be grasped by one brain and the treatment be worked out at one desk. Gradually the principle has been applied to counties and larger districts, where wiser selection of officers, better compensation, and larger powers will yet work vast improvement. The natural climax of the development has been reached in the movement to galvanize into useful action the more or less quiescent or perfunctory state departments of education. It is with these that we are particularly concerned.

THE STATE UNIT OF ADMINISTRATION

In the American Union the state, except for special purposes, is the largest administrative unit in educational affairs. As our commonwealths have become more and more self-conscious in laboring for the permanent protection and satisfaction of their people, the problem of education has assumed constantly increasing importance. The only successful plan hitherto discovered has been to obtain the services of the best trained minds available, regardless of cost, and about these leaders to build an organization with adequate powers. Thru this means the state hopes first to study and understand itself, and to have its needs translated into educational terms that may be embodied in suitable legislation. It aims, further, to gather and prepare the most profitable educational information for the benefit of all in the state who may need it. Most important of all, it aims thru this authority to make and enforce standards wherewith to express for the state as a whole the educational will and ideals that it could not realize in the isolated efforts of its parts. As the economy and profit of state regulation has become apparent, its scope has steadily enlarged: it affects in varying ways school buildings, equipment, and finances; attendance and curricula; the health of pupils and the duties of school directors. But the greatest and by far the most important feature of its extension has been its jurisdiction over qualifications of the personnel engaged in instruction and supervision, reaching sometimes even to the selection and pay of important local officers.

ADVANTAGES OF STATE CONTROL

This concern on the part of the state for the selection, training, and control of the teacher and school officer is the sanest development of modern school administration. A state making good use of its powers in this direction could probably afford to ignore most other elements in public education without losing its place in advance of its less far-sighted neighbors. For whatever the mechanical and material progress in an educational organism,—and this has been enormous in America during recent years,—the clearest lesson of our growth is that the real level of a school system is exactly measured by the character, ability, and well-being of its teaching and supervising body. Where these elements have been left to local initiative, progress has been fitful and uneven, with sharp and demoralizing contrasts; but where the state, representing the major ideals of the people, has boldly asserted its prerogative, and has shaped its teaching staff into a corps of trained public servants, officers of the state instead of local employees, the response from the community has been immediate, and the effect on the teachers has invariably been to give them dignity, stability, and strength. The obstacles encountered are chiefly those of unreflecting tradition: a public temper that resists high personal qualifications because it habitually thinks of public service in terms of opportunity for livelihood at public expense rather than as an obligation for the public welfare; a tendency in institutions to prefer expansion by catering to the anticipated future of the institution itself rather than by a direct attack on a problem that may involve a degree of sincere self-effacement; and lastly—the root trouble with the whole lay opposition—the inability to comprehend that a select and highly efficient body of teachers is well worth the relatively greater money cost. These attitudes are more or less prevalent in all states, and yield only to unremitting educational effort.

CONDITIONS OF SUCCESSFUL STATE ADMINISTRATION

To work its will successfully, experience has shown that a state must have a central educational authority possessing well-trained intelligence in technical affairs, coupled with full power and responsibility in its field, both completely shielded from political influences. When the state has indicated the general direction of its educational desires and policy, the more liberty that can be allowed its officers in working these out, the better, as they involve a multitude of details impossible of legislative regulation without destructive results. Particularly in the provisions governing teachers' qualifications and service the way should be left clear for free initiative and correction. Statutes on matters of such fluid detail serve no purpose save to bind the schools to the past and to set commissioners the useless task of accomplishing a necessary end in some roundabout way. Steady administrative change in matters of this nature, annual if need be, as the result of a systematic study of the total situation, is the rational method of progress as compared with a set of rigid laws followed by a long-agitated change to another set destined to become equally rigid.

Of all the phases of the teacher problem with which a state authority should be equipped to deal, that of preparation and supply is the most important. At this point the state's educational arm should be steady and powerful. Of what use is it to study the needs of the schools and to gather wisdom from outside experience if one is helpless to enforce reasonable standards of qualification? With no control over the agencies for training teachers, the central office is at the mercy of fluctuating conditions. Confronted with a very pressing and specific need, it is compelled to wait upon the independent heads of institutions whose purposes may be in no way identical with its own, and whose knowledge of the situation is bound to be far less complete. Teacher supply, instead of being a rational problem with known quantities, becomes as uncertain as a lottery. To secure the necessary results, professional training for teaching, when conducted by the state, must cease to be vague and fortuitous, as is much of our higher education, and must be subordinated to intelligent forces that are studying and guiding the state's educational interests as a whole. For this purpose, therefore, the direction of such work, whatever form it may take, should be placed under one harmonious control capable of building up a consistent structure to serve the state that creates it.

UNIFICATION OF CONTROL IN MISSOURI

How can an organization on these principles be brought about in Missouri? The best educational opinion will concur in the conclusion that the present system of local normal school boards is a disadvantage and should be abandoned. The foregoing section was devoted to a plan whereby these schools should be given their natural place in the university organization, with their executives in charge of the whole problem of the preparation and supply of teachers for the state. Informed opinion will likewise agree that it is a serious weakness to have a state superintendent elected by the people as a partisan, and that he should be replaced by a skilled officer, chosen solely for his ability, on a tenure of "good behaviour," and responsible to a group of intelligent laymen.

The absolute need for concerted action between these two authorities—the one responsible for training in state institutions, the other for administration at large—suggests at once the advisability of placing both functions under one board of representative citizens who shall harmonize their joint operations and ensure that all of the educational interests that are supported by the state be developed in a wise and mutually helpful manner. Such a step would be unprecedented in the management of state educational affairs in America. It is, however, the logical outcome of a powerful impulse toward unity that for years has been actuating the experiments in educational administration all over this country.

EXPERIMENTS IN OTHER STATES

In certain states, such as Massachusetts, Wisconsin, and, most recently, Illinois, improvement in administration has taken the simple form of bringing several normal

schools under the control of one board for the sake of economy. Only in Massachusetts has this unification included the state department of education, which, by virtue of its relation to the public schools of the state, has a predominant interest in the conduct of the normal schools. The board is served by an appointive Commissioner of Education, who thus has it in his power to coördinate the service of the normal schools with the needs of the state in admirable fashion. There being no state institutions for higher education in Massachusetts except the normal schools and an agricultural college, the board is, with this exception, a single authority for educational control.

Another form of consolidation has sought to unify all institutions for higher education under one management. Thus, Iowa provides an unpaid lay board of nine, with three paid lay executives in addition, and places it in charge of all higher institutions. This board has no competent educational adviser and executive such as a state commissioner presumably would be, but must depend upon the representations of the several heads of institutions, officers who necessarily speak, or must appear to speak, *ex parte* on all inter-institutional questions. In the Iowa plan, too, while the board controls the normal school, the state superintendent and his office, which should stand in most intimate relation with the normal school, are wholly independent; in fact, maintain an attitude of mild opposition to the board. In Kansas the same trio of institutions — a threefold normal school, an agricultural college, and a state university — are administered by a paid lay board of three members, likewise without a trained educational executive or adviser other than the heads of institutions. Here also the state education department, which naturally has a fundamental interest in the training of teachers, is left wholly separate and distinct.

The underlying purpose in Iowa, Kansas, and other states that have initiated similar schemes is to coördinate institutional activities in the interests of economy. To do this they have effected a degree of unification under merely "business" auspices, as it were, — a movement that has had some salutary effects, but the measures taken thus far have dealt largely or solely with the material phases of their charges. It has not been perceived that the critical problems involved are essentially educational, and can be worked out only by men with thorough educational training, empowered to act on slowly maturing policies with the intelligent coöperation of able colleagues, and with continuous study of the conditions. These states are like Missouri in thinking their duty done when they have established a modern accounting system for financial expenditures, and in ignoring completely the need for competent leadership in that for which the institutions exist. So persistent is this attitude that in Kansas the most recent development (1917) has been the appointment of a paid "business manager," by law a Kansan, responsible to the board, and expected to handle the financial affairs of all state institutions; meanwhile, the direction of the educational policies of such institutions as are educational has reverted largely to the local authorities, where it should remain as long as no competent educational executive is placed in control.

The single board plan has attained fuller stature in Montana, where a board of

eleven members governs all the higher institutions of the state. This board sought a trained man as its educational adviser and executive. So far as our present experience goes, the plan is sound. As in the other cases, however, there is an independent, elective state superintendent for the administration of the elementary and secondary schools. This disadvantage is not overcome by making him a member of the board; were he appointed by it and responsible to it, his relation would be logical and strong.

LESSONS FROM RECENT EXPERIENCE

The best American experience points to the conclusion that a single board of from five to seven members appointed or elected at large for long terms, unpaid, and representing high and varied ability, is the most successful form of educational control yet devised for a democratic community. But it must be so constructed and equipped that it will automatically obtain its educational advice from competent sources. These sources of technical advice must not compete with one another, but must be so disposed as habitually to find their point of view in the welfare of the state as a whole. The heads of independent state institutions for higher education do compete with one another, and from a point of view not usually chosen with regard to the welfare of the state as a whole; such institutional interests should therefore be brought under one supervision and be represented by a director or chancellor for the state's undertakings in higher education, all of which should be more or less firmly organized into what is called the university.

On the other hand, the so-called state department of education, if it discharges the functions properly assigned to it, has a preponderant interest in the performance of the higher educational institutions that prepare teachers. Its executive, if a skilled appointive officer, as he should be, is virtually the chancellor of elementary and secondary schools—a position that beyond all question is potentially the most widely influential within the range of a state's educational system. The primary concern of such an officer is with the great body of teachers in service; he studies their conditions, regulates their qualifications, eliminates the unfit, and inspires and improves the capable. The best practical reason for his existence is that the state may maintain an adequate and fully competent supply of teachers in its schools. It is obvious that in order effectively to perform such duties he must find the whole machinery for preparing these teachers reasonably responsive to his desires and policies.

The conclusion is unavoidable that to bring these two great administrative centres of state education into constant touch with one another under the eyes of a single group of men responsible to the public would be a long stride in the direction of an effective organization. The state's entire educational program would gain greatly in consistency and force if laid out by one permanent, controlling body; while the economy of power in the direct methods of a unified administration would be incalculable.

RELATIONS OF CONSTITUENT DEPARTMENTS

The question will at once be raised as to the relations of the two executive departments subordinated by this plan to the single board. On this important point there is no actual experience available for guidance. Analogies from business enterprises would favor a single officer as the chief adviser and executive for all purposes, and there is every indication that such an appointment will eventually prove to be absolutely necessary. When Missouri is willing to spend not less than fifteen thousand dollars a year for a thoroughly trained and tested man and provide him with two or three deputies at ten thousand dollars each, she will inaugurate the organization that will most surely give her educational interests their appropriate place and meaning in the state's social economy. At the present time, however, such experts, thoroughly familiar with the problems that lie thick throughout the whole range of educational effort, would be hard to find at the price that Missouri is probably prepared to pay. We have men who know higher education well, and others who understand state administration in all of its phases. A single chief for both departments, except with ample funds for a capable staff, would certainly mean the relegation of close thought and careful planning in each field to inferior subordinates, while the head became a free lance for general purposes. This would not be what is needed.

The alternative is a single lay board seeking advice, in the institutional field, from the head of its whole establishment for higher education; and in the administrative field, from its commissioner who represents the investigative, regulative, and administrative phases of public education as far as the elementary and secondary schools are concerned. These two departments are as distinct as are the divisions of army and navy in the national economy, and yet quite as interdependent. Their respective heads, as Chancellor of the University and Commissioner of Education, should be chosen with equal care and receive equal compensation. They should be non-voting members of the board and participants in all of its deliberations. Coöperation should be their first duty in planning recommendations to the board, and should be the first requirement of the board in case of disagreement, even to the retirement of one adviser or the other.

Such an arrangement, so safeguarded, might reasonably result in a more vigorous and expert leadership of each department than would be possible, for the same expenditure, under the one-man system. It would certainly lead to a more thorough study and threshing over of joint problems than a single head could require of his less skilful subordinates. Its tendency would apparently be away from a cheap bureaucracy under spectacular leadership in favor of a better vitalized, working group in closer touch with actual conditions.

To recapitulate: Missouri, were she to act on these proposals, would possess a reorganized university which would include all the tax-supported agencies that are concerned with higher instruction, unified completely in a single self-acting, self-criticising organism, and represented by a single administrative head—the state's director

of higher and professional instruction. Within this organism the broad function of preparing teachers for the public schools of the state would be entrusted to a small group of specialists acting in unison and in immediate control of the several institutions for accomplishing their purposes. Side by side with the university would appear the state's large and ever increasing organization for supervising and regulating the operation of its elementary and secondary schools, for administering its many aids and funds, and for studying and reporting the educational health and needs in every part of the commonwealth; this would be in charge of the same board, but subject in turn to its own administrative head—the commissioner of education, an officer ranking with his university colleague, equally fitted for his position, and receiving an equal salary. The chief business of the board would be to keep the best obtainable executives in these two positions, and to require them, in constant coöperation with one another, to furnish reasonable evidence of successful service. Beyond that the function of the board would be to uphold and protect its servants; to interpret their aims and measures to the state; and to promote among the people a generous conception of public education.

V

PURPOSE OF A NORMAL SCHOOL

A. GENERAL FUNCTION

1. THE EXISTING CONCEPTION

"WHAT should a normal school be?" This is a question which, according to Joseph Baldwin, the first president at Kirksville, "only the angels can answer." Whatever the accuracy of this verdict, it is possible at least to discover what the function of the institution has been as worked out in practice in Missouri.

EARLY CONCEPTION OF THE FUNCTION OF A NORMAL SCHOOL

The question may be reduced to the following alternatives: the normal school shall either provide a general education, making its professional features more or less incidental, or it shall undertake to give an intensive professional training, exclusively for teachers. Of these alternatives, Missouri at any time in her early normal school history would have emphatically asserted the latter. From the beginning, the movement was in the hands of men who had unlimited faith in the professional idea. Its appeal was founded on the prevailing low state of training among common school teachers, and it was promoted by teachers, superintendents, and associations of these, who had definitely in mind the elevation of the class as a whole. So in 1871 the State Teachers Association at Chillicothe resolved "that the normal schools should be at the head of our educational system; that the course should be purely professional; and that all preparatory work should be done in the public schools and universities."¹ The early curricula exhibit this predominant idea very clearly: it was never a question of giving or of not giving the professional subjects, but always of how much academic material would suffice to supplement the defective preparation with which most students came equipped. All subjects were presented or reviewed from the standpoint of their most effective presentation to a class, and the practical usages of instruction received heavy emphasis. "No effort has been spared to make the institution exclusively a school for teachers."² "In arranging the course of instruction strict regard has been paid to the requirements of the public schools of Missouri, and in carrying out that course our constant aim has been to give such training as will best qualify the graduate both intellectually and morally for effective work as a teacher."³ These statements from Warrensburg in 1878 and 1886 reveal the attitude of the other schools as well. President Baldwin, at Kirksville, declared in 1872 that "every energy is directed to preparing for the public schools of Missouri the largest number of good teachers in the shortest time,"⁴ and in 1880: the aim of the school is "to give culture and learning, not for the benefit of the student, but that it may be used in the edu-

¹ *State Report*, 1871, page 19.

² *Ibid.*, 1878, page 224.

³ *Ibid.*, 1886, page 108.

⁴ *Ibid.*, 1872, page 166.

cation of the masses.”¹ Especially instructive are the observations of State Superintendent Monteith, who was in office when the schools were started:

“It is a pretty well-defined result of experience, too, that normal schools should be quite elementary in respect to the subject matter and curriculum of study. In a school system which embraces high schools and universities, there is not the slightest reason why the normal school should duplicate the instruction of these more advanced institutions. I am thoroughly convinced, in observing the mistakes of other states, that the normal school is disappointing the object of its design when it drifts away from the common schools of the country. With this object steadily in view, our Board of Regents are endeavoring to adjust the two schools already established to the special conditions and wants of the state. The higher mathematics and dead languages, except within a certain eminently practical limit, are to give way to a more generous attention to natural science, drawing, and the perfecting of teachers in the best methods of conducting the common branches of the common school.”²

Missouri normal schools, therefore, were founded to train teachers. To say “exclusive” would be technically wrong, as certain readjustments were occasionally made here and there; for example, special classes in Greek were sometimes offered to accommodate a few who wished to go to the university, and certain individuals were occasionally present who did not declare their intention to teach. But the clear and consistent aim apparent under all circumstances was to provide teachers, actual or prospective, with special skill for their duties, and in their reports to the legislature all the schools were solicitous to show that the largest possible proportion of their students were actually teaching in the state.

SUBSEQUENT VARIATIONS

This fixed purpose of the first thirty years has wavered in some schools during the subsequent period. The three original institutions furnish an interesting contrast in this respect. In 1909, under the caption “People’s College,” Kirksville announced itself as follows:

“The State Normal School, Kirksville, Mo., is attempting to do a great work for the people of the state by giving studies reaching from the kindergarten through the most advanced college courses. This wide range of work—meeting the demands of all the people—is found in very few first class schools. While advanced common school courses are given in this institution for the benefit of those who are preparing to teach in the rural and ungraded schools, academic degrees are conferred upon those who have completed the work offered by our best colleges. This brings the school in close touch with the people by giving an elaborate education to those who want to enter the professions, and a vocational education for those who want to take practical business courses. It cannot be denied that the Normal School comes nearer the people than other schools and may therefore be justly called the People’s College.”³

¹ *State Report*, 1880, page 159.

² *Ibid.*, 1872, page 37.

³ *Bulletin* (Supplement), *Kirksville*, June, 1909, page 1.

This statement is followed by an extensive program of courses that are clearly not intended for teachers—one-year curricula chiefly in farming and commerce. Nowhere in this bulletin, furthermore, is there a clear statement that the school is of a limited professional character, or that a declaration of intention to teach is required. It holds out rather an alluring vision of a sort of educational lunch counter where everything “the people” wish may be had in portions suited to their convenience.

The “People’s College” idea does not appear to have thrived; at any rate, nothing more is heard of it, and the catalogue of the following year goes back plainly to the original aim: “The Normal School is not a college for general culture. It is a vocational institution of college rank. Under the law its students declare their intention to teach in the public schools.” The subsequent catalogues have shown a single, strong professional purpose.

At Cape Girardeau an enlargement of scope was announced in the same year as at Kirksville. The catalogue of 1909 declares: “The Normal School has a larger mission in Southeast Missouri than that of a state college for teachers. . . . The institution must be to this section of the state their one great college. It is fully equipped to meet the demands that are naturally made upon it. In its college courses; in its agricultural courses; in its Manual Training School; in its domestic science and domestic art courses; in its School of Music; in its business courses; and in its teachers’ college the people of Southeast Missouri will find the opportunity to educate themselves for their life work.”

Tho placing its teachers college last in the above list, the school elsewhere in the catalogue clearly defines its legal teacher-training function as a portion of its activity. In the catalogue of 1910 its “Field of Service” is formally described as comprising “A School for Teachers,” a “Sub-collegiate” department, and “A State College,” the latter offering (since 1907) courses leading to the degree of A.B. and requiring in them no work in education whatever. Here we have, therefore, an institution deliberately revising its organization throughout and introducing, not one-year vocational courses as at Kirksville, but an elaborate curriculum with a new and alien purpose. It is difficult to see how either school could reconcile these departures with the law’s demand for an exaction from each student of a declaration of intention to teach in the schools of Missouri. Cape Girardeau, and possibly Kirksville, has been saved from embarrassment thru the fact that but for a single case no graduate has taken the courses except prospective teachers who could also avow their intention to teach; that, however, scarcely justifies the appeal for students distinctly excluded by law. This divided purpose at Cape Girardeau has never been abandoned. On the contrary, it has been officially reaffirmed in the school’s magazine publications of 1913 and 1914,¹ where the pledge to teach is declared to be out of date, and it is frankly proposed to adapt the institution to the needs of men and women who will teach but a short time, if at all, and whose professional interest is therefore incidental at best.

¹ *The Educational Outlook*, October, 1913, page 136.

Warrensburg, on the other hand, has consistently adhered to the original plan, to the extent, at least, of an unequivocal announcement of her special aim in every catalogue down to the present year. An expression in the school's biennial report of 1885 is a fair sample of the early attitude: "On all proper occasions we have taken pains to spread abroad the impression that this school is designed for the training of teachers and for no other purpose whatever." In the catalogue of 1904 the "Object of the School" is defined in the following paragraphs:

"In the law creating Normal Schools in this State the following passages occur:

"The course of instruction shall be confined to such branches of science only as are usually taught in Normal Schools and which may be necessary to qualify the students as competent teachers in the public schools of this State.

"Every applicant for admission shall undergo an examination in such manner as may be prescribed by the Board [of Regents], and they shall require the applicant to sign and file with the Secretary of the Board a declaration of intention to follow the business of teaching in the public schools of this State."

"The following is the pledge required of every student upon entrance and registration:

"I hereby declare that it is my intention to follow the business of teaching in the public schools of this State, and that I voluntarily enroll myself as a student in the State Normal School at Warrensburg for the purpose of preparing for that work."

"The limits prescribed for the course of study and the form of the pledge show that but one purpose was contemplated by the State in establishing these schools, viz.: *The training of teachers* for the public schools of the State."¹

Similarly in 1905 and after, the school's "sole function is the preparation of teachers for the schools of Missouri." "The school does not exist for the benefit of its students, but for the benefit of the whole people."² And in 1912: The school's "sole purpose is to confer on its students that education, discipline, professional training, and practical skill which will best fit them for teaching in the public schools of the State."³

The schools at Springfield and Maryville, founded in 1906, have in general followed the exclusively professional ideal also, as their catalogues attest. Southwest Missouri has been an unusually fruitful field for such single-minded service, and the school at Springfield has prospered remarkably. Maryville, in 1914, devotes two pages of its catalogue to the exposition of this distinctly professional aim. It is with some surprise, therefore, that one sees it weakened in 1916. The school now calls itself simply "an educational institution," and, besides enumerating the various teacher-groups that are provided for, invites also those who are "seeking to secure the preliminary college academic requirement" for the university, or students from other colleges who seek "to extend their credits in college," and finally observes "that many persons not immediately concerned with teaching find pleasure and profit in becoming enrolled in our classes." There is no reference to the declaration of intention to teach required by law.

¹ *Catalogue, Warrensburg, 1904, page 15.*

² *Ibid., 1905, page 20.*

³ *Ibid., 1912, page 16.*

SPECIAL CONSIDERATIONS AFFECTING A NORMAL SCHOOL'S CONCEPTION OF ITS FUNCTION

Before discussing the merits of the question involved in these divergent proposals, there are certain additional facts to be considered. In spite of the professional ideal that, with the above exceptions, has dominated the schools, the notion of a general education has almost unconsciously, and for historical reasons, influenced their purpose. From the beginning the students in these normal schools have been exceedingly heterogeneous, with a preponderance of mature minds of good ability but with very defective preparation due to lack of opportunity. The all-important preliminary process was therefore necessarily one of fundamental education, and it is impressive to note how consistently the Missouri normal schools have urged this principle, even tho at times they appear to have failed to practise it. Throughout their history they seem to have been ardent advocates of having something to teach as compared with certain schools in other states that sacrificed their character on the altar of "method."

PRESSURE FOR ACADEMIC CREDIT

Furthermore, it should be noted that as purveyors to that occupation of teaching whereby chiefly needy and ambitious boys and girls obtained the means for further education, these institutions stood in tempting relation to the fuller education that their students sought. It was a matter of course that the kind of student who came to the normal school had taught or would teach; teaching was his most obvious resource for temporary support. Hence in very many cases the student accepted professional work as a necessary incident, while his real attention was upon the academic work that would be accepted for credit in another and higher institution. It was but a step, and a very natural step, for the normal school to develop its requirements with such an end in view. A genuine desire to prove serviceable to hard-working students who were using the teaching profession merely as a ladder, and a less worthy feeling that such students brought to the school not only numbers but prestige, combined to enhance the "college" idea as a legitimate goal. Aside from Cape Girardeau's wholly non-professional curriculum already mentioned, the sixty-hour curriculum for high school graduates at Maryville, in 1914, illustrates such a purpose: in the effort to offer only subjects that might be used for credit elsewhere, no special study of the history, geography, and arithmetic that these students were presumably later to teach was required, except as it appeared fragmentarily in ten semester hours of practice teaching.¹

That pressure of this sort has been and still continues to be severe seems evident from the replies made by students to enquiries at the various schools. Sixty per cent of the students in attendance at the time of inspection declared that they did not intend to teach permanently. With the women the factor of prospective marriage probably weighs heavily; this cannot, however, be true of the men, seventy-eight per cent of whom make the negative reply. Such students naturally have little interest in an in-

¹ Good normal schools elsewhere were at the same time requiring 12-15 semester hours in these subjects aside from a full semester of practice work.

tensive professional training; those studies please them best which give them the most credit for future use. Even the men who are intending to continue in the field of education find but little inducement in the work properly expected from most of the women. The latter expect to teach, while the men hope to go directly into administrative positions. As a group the men in the normal schools seem to be a disintegrating element, yet the efforts made to attract and retain them indicate that their presence is nevertheless much preferred to a homogeneous professional group more largely made up of women.

EFFECT OF LOCAL CONTROL

A third motive for stress on general education has arisen from the complete local attachment and control of the schools. The town or county has paid a heavy bonus for the location, and naturally exercises proprietorship. The schools are severally in the hands of local boards, who really own them in behalf of their respective districts. They are maintained largely, to be sure, out of state funds, but the amount of such appropriations depends upon the energy and influence of their board members and friends who lobby vigorously, and is never in any sense the considered proposal of a state authority directing the institution solely for the good of the whole state. They become, therefore, the local public educational institutions; and the fundamental theory of a school to train public servants for the benefit of the state is largely obscured by the more attractive idea of a place where local youth may prepare for college, or even pursue collegiate studies and acquire degrees. Town or sectional pride urges this interpretation on the institution, which in turn is anxious to recruit its numbers because of its feeling of responsibility to the local community.¹ Regents with pet notions find an easy field of influence, and often have slight perception of the larger purpose of the school. One of these urged that, as his school had an old telescope in its possession, it should undertake collegiate courses in astronomy. Administrators naturally yield most quickly to the forces that feed and affect the school, and when dependent solely upon such local influences can scarcely be blamed if truer ideals seem distant and impracticable. It is easy, under these circumstances, to *include* the professional idea, because, as already pointed out, it fits the economic situation of most of the student patrons; but to make it really the sole and sufficient reason for the school's existence is less easy, and probably cannot be fully accomplished under the present system of control.

"DEMOCRACY" THE JUSTIFICATION

The situation described in the foregoing paragraph has, of course, developed a theory, or the interpretation of a theory, for its justification. Great emphasis is placed

¹ An everywhere vigorous and vocal expression of this town pride rises from the vested interests dependent on the schools—boarding-houses, stores, churches, and so on. Thus, a writer in the local newspaper of one of the normal school towns struck a responsive chord when he declared that the present study would undoubtedly discourage the attendance of men at the school, and send both men and women to "enrich the boarding houses of some other place." *Kirksville Express*, December 10, 1914.

on the perfectly valid creed that the people know what they want, and that democracy in education consists in gratifying their desires. But from this creed there is then drawn the inference that because the people desire good teachers, the people are therefore competent to direct the institution that provides them, and that the institution is most "democratic" that yields itself most completely to the popular local fancy. Such, unfortunately, are the terms on which it is often possible, thru spectacular features, to develop a large school; but such is not the way to give the people what they, at heart, desire. An intelligent society has learned not to interfere with competent professional service when it would be healed or seek justice at court; that service commands the maximum confidence which, for a selected end, most completely refines and dominates its choice of means. This temper is superlatively characteristic of a good school; it must mould and dominate public opinion in its field; it must guard its aims and processes from public interference precisely in order that the public may get the service that it wants. No other interpretation of public service is worthy of a democracy, but the present system of local control makes such detached and efficient service difficult if not impossible.

PROFESSIONAL TRAINING LONG UNCERTAIN AS TO ITS METHOD

Finally, the development of professional training itself has involved the conception of general education in an ambiguous and confusing manner. When the Missouri normal schools were established, two theories existed as to their operation. According to the first, the purpose of the schools should be solely to teach subject-matter properly; it was said that students would teach precisely as they had been taught, and could shift for themselves if filled with ideas to be communicated. According to the second theory, only the indispensable subject-matter should be given; the main purpose should be to develop the philosophy of method and to test the skill of the candidate in using methods. The latter theory was the one adopted and chiefly followed,¹ altho, as has been said, the schools appear to have insisted usually that the foundation of subject-matter should be substantial. Little by little, however, both in Missouri and elsewhere, the whole normal school practice seems to have hardened into a formalized method from which the schools were aroused thru criticism by the universities. The latter had been persistent adherents of the first of the two doctrines noted; consequently the cult of "method" received little but ridicule, and in so far as it had developed a pose to hide its insufficient learning, its pretensions were quickly punctured. Under the fire of this attack many unworthy accretions of "professional" lore disappeared—sentimentalism, mystic reverence for formulae, a not infrequent quackery; while such conceptions as survived the refining process were eventually accepted for use in normal school and university alike.

Apart from this salutary process, however, and somewhat preceding it, came an

¹ These two points of view are well stated in one of Superintendent Monteith's discussions. See *State Report*, 1872, page 37.

increased mechanical emphasis on what the university primarily stood for, namely, content. In Missouri this is illustrated by the change that came over all the institutions about 1900, when within two years the headship in each was transferred to a new man. The university high school inspector and former state superintendent of public schools went to Kirksville with a commission from the president of the university to "go and put scholarship into that school." The president of Central College at Fayette, Missouri, went to Warrensburg, and a successful school superintendent, a graduate of the state university, went to Cape Girardeau. The effect of this infusion of fresh academic blood became immediately apparent in the announcements of the schools: the cultural idea; the proposal, in order to make teachers, to make "first educated men and women;" the notion of "a broad academic foundation" are all insistently emphasized. Accordingly, the studies considered "academic" were set off sharply from those termed "professional," and commanded a certain special respect if only because they were terms shared in common with the higher academic world; and this distinction has in general been pronounced even to the present day.

The influence of this development has been marked both on the students and on the institutions. In effect the school has unconsciously said to the student: "This academic foundation is your education; it is of prime importance, it has nothing to do with teaching, it is what you want for life, it will serve you if you proceed to college or professional school; as a teacher-preparing agency we are obliged to hang in your belt certain tools that will get you a license and may be useful if you teach, but they are not big enough to be in the way if you do not, and an educated person ought to have them anyhow." Thus its very endeavors to meet more satisfactorily its professional purpose by strengthening the academic foundation have created in the normal school a divided aim which it has not known how to unify, and of which the various other centrifugal tendencies already enumerated have taken full advantage.

In its effect upon the institution itself this situation has been positively disastrous. With the emphatic division of subjects into academic and professional groups came naturally a corresponding division of the staff. Teachers of educational subjects, including the practice-school director and supervisors, should be the core of the institution; distinct from them are the academic instructors, who generally will have nothing to do with the practice school or its works. In members of the academic staff, pride of subject, and often of better training, has bred not a little scorn (carried over, perhaps, from the universities from whence they came) for the department of "pedagogy" and the ill-paid supervisors of the training school. At any rate, these academic instructors have rarely been selected for their knowledge of how to teach young children; their interests and sympathies are elsewhere, and the organization of the school has usually failed to exact of them responsibility for this phase of their duty.

In some normal schools, not in Missouri, the faculty is split from top to bottom on this line, and even in Missouri, with the sole exception of Springfield, the cleavage

is apparent. The inevitable tendency of such division of sympathy and purpose is to reproduce itself in the mind of the student. His strictly educational courses lack conviction because they lack relation, and fail of the illustrative and cumulative force latent in the so-called "content" subjects; the latter, in turn, conceived as ends in themselves for "general education," terminate often in a series of blind alleys whence the student neither gets further nor sees how his achievement affects his main purpose.

2. NORMAL SCHOOLS SHOULD TRAIN TEACHERS

It is the judgment of the authors of this report that institutions established by the state to prepare teachers as public servants for its schools should make that business their sole purpose and concern. The character of such preparation is a question of administrative knowledge and policy. It will depend upon the amount of financial support available, and will be modified by the varying need for teachers in the state and by the rewards offered in the communities to be served. But with their method and specific goal thus defined, no consideration whatever should divert such schools from their task.

The grounds for this conclusion are simple and obvious. The question is one of institutional economy. Each school has a certain amount of energy expressed in terms of its annual appropriation plus its organization and permanent plant. With this energy it confronts a definite and difficult task contemplated in the statute,¹ namely, with the help of four similar schools and of the university, to place a competent teacher in every teaching position in the state. This is a task with which these six schools have scarcely begun to cope. It is a task so great that large and important portions of it have temporarily to be farmed out, as in the inevitable allotment for the present of the teachers of the large cities to the city training schools, and of rural teachers to the high school training classes. Hitherto the schools have trained a few teachers thoroughly, and have given a meagre smattering to a vast number. Even the few have received a generalized training which will not be tolerable longer if the reasonable demands of educated communities are to be met in Missouri as they are already met in some other states. There is an overwhelming need for more prolonged and more intensive training, extended to include as many as can be reached. In the face of this heavy obligation which the state lays upon the normal schools, it is difficult to justify the proposal of any school, say of Cape Girardeau, to use its share of the all too scanty training funds to develop a local university. This means, as indicated in the prospectus already quoted, to relegate its training of teachers to an inconspicuous department; to promote the other phases of collegiate work for their own sake and not alone as they produce better teachers; to fill classes, as college classes are now filled, with some who will teach, some who will farm, some who will be politicians,

¹ The Revised Statutes of 1909 declare that "the course of instruction in each normal school shall be confined to such subjects in the sciences and arts as are usually taught in normal schools and necessary to qualify the students to become competent teachers in the public schools." See Chap. 106, Art. 14, Sect. 11071. An Act of 1919 extends this to include "such subjects in the arts and sciences as are usually taught in teachers' colleges, normal schools or schools of education." Sect. 11075.

and many who have no specific purpose; in other words, to sacrifice the enormous advantage of momentum and *morale* that inheres in a single fine idea well worked out, for a round of inevitable mediocrity. For the school has at best wholly insufficient funds for its present logical purpose—the preparation of a competent teacher for every position in its district. To take over other projects, as these are conceived in modern education, is not only to fail in its proper task but to fail altogether.

The case of Cape Girardeau is especially interesting, inasmuch as for many years both regents and administration have made every effort to realize this “larger” notion. Elaborate advanced “college” curricula, special scholarships “for graduates from other colleges,” and an enthusiastic literature have all pushed the idea. But only a single graduate has as yet (1917) gone out from such courses; the school is still as solely a normal school as is any of the other four. And with good reason: Cape Girardeau has taken pride in being a good school, and both teachers and students have dimly perceived that it was impossible to be a good normal school and a “great college” on the same appropriation. There is doubtless truth in the claim that, as college attendance is in great part local, more southeast Missourians would go to college if they had one nearby. But it is just as true that a good normal school is a professional school throughout and cannot be an arts college; if it wishes to conduct a college that is self-respecting, it must have double funds, separate classes, another faculty selected for that purpose, and so on. The combination is not a happy one in any place where it is now on trial, and the logic both of theory and experience is against it. The college agitation at Cape Girardeau has probably done good rather than harm; some public interest has been aroused, and a college foundation may some time seize the imagination of the wealthy men of that region or be developed from the local high school by way of a junior college as elsewhere in Missouri; but the obvious way to help in bringing about this result is for the present institution to discharge its own peculiar task well, and to fix its ambitions on becoming the best purely professional training school for teachers in the Middle West.

Cape Girardeau is an excellent illustration of a school appropriated body and soul by the local community in the hope of making it the engine of local ambitions. The town and county bought the school in the first place, and can scarcely be blamed for owning it now. Fortunately state control of the funds, by forcing it into comparison with the other schools, still determines its general line of action, but it can probably never reach its maximum power until it acquires a controlling board disentangled from local concerns and sympathetic with its proper purpose. Reimbursement of this and the other counties for their original outlay would be a small price to pay as compared with the benefit of independent management.

OBSTACLES TO PROFESSIONAL TRAINING ARE DISAPPEARING

Other obstacles to an exclusive and intensive professional development in normal schools are happily vanishing. Secondary work, to which the normal schools have hith-

erto of necessity been tied, seems destined early to disappear from them. The phenomenal increase in high school facilities has brought secondary education within the possible reach of nearly every student,¹ and the higher institution owes it to the lower to turn back every pupil of high school age who can attend a local or neighboring school before coming to the normal school. Many of these country high schools have large contingents who come in for the week from the surrounding territory. Especially where training classes are installed, every consideration appears to favor the development of local training centres for secondary work. Mature persons, for whom the high school makes unsatisfactory provision, should be given opportunities elsewhere.²

The question of relation with other higher institutions is likewise being disposed of successfully. As this problem has existed, however, an important distinction should be made clear. It is one thing for those who have taken a strictly professional course and who expect to give themselves seriously to teaching to urge that they be allowed to continue their preparation in other institutions without loss of credit; it is quite another thing for persons who have no such intention to demand that the normal school give them a general education that will see them into college and professional school. For the first group adjustment has already been accomplished. Two-year graduates of the normal school may enter the School of Education at the university without serious loss of credit, and the recent conference arrangement between normal schools and university provides that students doing four years of standard work at a normal school may be admitted to graduate work in education at the university. The second group should be dealt with drastically, as the institution values its professional integrity. If elementary and high school instruction in this country is ever to be cleared of its traditionally random and trivial reputation, training agencies must insist on a curriculum so specific in character as to make its choice a fateful step in an individual's career. There will doubtless always be quondam teachers who fail and practise law, just as there are quondam physicians who fail and sell insurance, but it is intolerable for an honest training school so to relax its administration and enfeeble its courses as to put the transient at ease. Every normal school student should feel behind him a full tide of pressure from every quarter urging him to teach and to do nothing else, and he should contribute the impetus of his own clear decision to the general impulse.

UNITY OF AIM INCREASING

Finally, in the professional training itself there are discernible strong tendencies making for unity. The present schism in staff and curriculum was the result, at first, of the difficulty of securing competent teachers of academic subjects who possessed likewise a thorough training in education and successful experience in teaching children and youth. This is still an unusual combination, but, thanks to rapid growth of schools of education and to improved product in the normal schools, it is becoming

¹ See page 297.

² See page 300.

less rare. In the case of the curriculum, the result seems to have been due partly to unsympathetic instructors, but more largely to a desire on all sides to swing as far as possible toward the collegiate idea and away from the earlier attitude. It is now evident that this emphasis has been greatly overdone. The normal school that is true to itself finds it impossible to be a college. A genuine professional purpose makes itself felt much further than the purely technical subjects; it governs the selection of material for every curriculum, it grips every course that is offered, and that in no perfunctory fashion as formerly, but with a clear, scientific conception of the ultimate aim in view. "With a mission like this, why waste time trying to be a college?" is the convincing retort of the modern training school. Again, if this clearer definition of aim affects the attendance of men at the schools, let the situation be faced frankly. There is nothing to be gained for the profession of teaching by catering to a set of individuals who definitely intend to make their normal school course and a year's teaching a step to other work. Such a procedure cheapens the course for its proper candidates, and advertises most effectually that teaching is a makeshift occupation and preparation therefor a farce. It is certainly most desirable to make the teaching profession attractive to men; but, given higher financial rewards, the surest way to convince them that there is something to it is to make it genuinely selective in respect to length and character of preparation. If they cannot be held on these terms, there is no help for it; any other condition is illusory and dishonest.

A NORMAL SCHOOL'S OBLIGATION TO THE STATE

The efficient teacher-training school of any grade is not to be measured by college, university, law, medical, or other liberal or professional institutions. These operate indirectly for the general good, but their direct aim is rather the intellectual or vocational benefit of the individual. The school for teachers, on the other hand, is the immediate instrument of the state for providing a given number and quality of public servants to discharge the main collective obligation of society to the next generation. Salaried staffs of physicians or lawyers supported by state or city for the whole people would imply a similar function in medical and law schools. Even so, the large number of teachers required, in proportion to the number of doctors and lawyers, would tend to elaborate and standardize the teacher-training agencies above other schools. Private and outside sources would not play so large a part, nor would such wide individual variation be acceptable in preparing five thousand as in furnishing three hundred.

In view of this peculiar relation to the state it is evident that, to be effective, the training institution should have two characteristics in a preëminent degree. First, it should have a vivid purpose. Its sole aim being to train teachers, every item of its organization should contribute either to the final excellence of its product, or to the creation and maintenance of conditions in its region that will make its product most successful. Irrelevant work that can be done elsewhere should be discontinued as soon as possible; bogus or uncertain candidates should be rejected; diversions of aim, how-

ever attractive, should be avoided. The school should do one thing and do it mightily. In the second place, it should be wholly responsive. First and last it serves the state and not individuals; as an efficient instrument it must be sensitive to control. New types or altered numbers of teachers, fresh courses to be added, higher standards to be set,—all of these should find the training school prepared for continual and automatic readjustment. The informed and authorized directors of the state's educational policy—and the state should obviously have such directors—should not find themselves helpless because of institutional conservatism, opposition of alumni, or local entanglements. To ensure this, the school clearly should not be entrusted to an irresponsible head for personal exploitation; the measure of excellence in administration should be a quiet and rapid accommodation to the changing demands of the state's educational authority. The loyalty of alumni should be won, not for persons or places, but for the skill with which the school does its work and for its flexible adaptation to its duties; the head of an institution who, by personal appeal to numerous or powerful graduates, seeks to swing his own policy at all costs is abusing his trust. Finally, to be responsive, the school must be free from local pressure and interference. The state as a whole invariably wants for itself better things, and defines those wants more wisely than can be the case in any but highly developed urban districts. To tie a school down to the limited vision of a small area is to deprive the community of that margin of superiority which the whole state has achieved and formulated.

B. SCOPE OF ORGANIZATION

The successful administration of a school for the preparation of teachers depends upon a precise definition of the ground it is to cover. The total field is very extensive, and with the development of modern educational requirements, presupposes a multitude of curricula and a wealth of equipment unimagined at an earlier period. A historical survey is essential.

1. HISTORICAL VIEW

The plan of operations in the early Missouri normal schools is nowhere better indicated than in the following paragraphs from the Kirksville catalogue of 1876, under the caption "Professional Department:"

"*The First Year's Work* embraces: 'How to Maintain Vigorous Health,' 'How to Study,' 'How to Recite,' 'How to Organize and Govern a Country School,' and 'How to Teach the Common Branches.' The elevation of country schools is the grandest work of the age and is the peculiar mission of the Normal School.

"*The Second Year's Work* includes: 'Methods of Culture,' 'Practice Teaching,' and 'Graded Schools.' Methods of culture are based on an oral course in mental philosophy. Educational principles are evolved, and these are made the basis of the art of teaching. Teachers are fitted to take charge of primary and grammar school departments of graded schools, and of the best country schools.

"*The Third Year* is devoted to the thorough study of Psychology and methods of cultivating every power of the soul. While good use is made of the best books on mental and moral philosophy, much of the instruction is necessarily oral. It is left for the future to produce works on these subjects prepared from the educational standpoint. The value of the third year's work to student teachers cannot be estimated. It opens up to the student a new world, and revolutionizes his mode of thought. Here is laid the solid foundation for the science of education, and for artistic teaching. Teachers are prepared to work in graded and high schools.

"*The Work of the Fourth Year* is directed to fitting teachers for the best positions, such as principals, assistants, professors, and county superintendents. The teachers of this grade are prepared to discuss philosophically the great educational questions. The history of education, the philosophy of education, the graded and high school work, the superintendency and the institute work, engage special attention."¹

The interesting feature of this prospectus is the fidelity with which the scheme reflects the situation then existing: promotion is the fundamental idea, and consists in mounting the educational ladder from the rural school to the graded town school, thence to the high school and superintendency, to be followed by "institute" or normal school work; for such rise in the scale the normal school course is intended to prepare year by year. One grade of teaching with a little added study constitutes suitable preparation for the next; the thought of each kind of work as a goal in itself, worthy of extended and special preparation and of equal dignity with any other, does not occur. For the rural teacher the time when he shall become a "principal, professor, or county superintendent" is the zenith of desire; when at the summit he may doubtless aspire higher. This conception of promotion was the outcome partly of primitive educational economics, partly of a meagre knowledge of teaching, and is yielding but slowly as reward increases and professional preparation develops. Altho the old notion still governs much of our practice, we are to-day nearer the time when, with a prolonged initial preparation, a skilful teacher may look forward to recognition and promotion within the field of service where he did his first teaching.

EARLY WORK CHIEFLY FOR ELEMENTARY TEACHERS

Candidates for the two advanced years of the early curriculum given above were few, and the normal schools soon found that their chief work was to be with short-term students in search of the little learning that would enable them to obtain the low grade certificates required by law. In 1878 President Baldwin of Kirksville reported "over forty classes daily in the elementary" first two years "and but ten in the advanced course."² "A number attend but one or two terms; most remain from one to two years."³ So, too, at Cape Girardeau in 1882: "Much the larger part of the normal work is necessarily devoted to the elementary course."⁴ The state superintendent interpreted the situation exactly when he declared:

¹ *Catalogue, Kirksville, 1876, page 22.*

² *State Report, 1878, page 217.*

³ *Ibid., 1874, page 45.*

⁴ *Ibid., 1882, page 159.*

"It must be borne in mind that the chief business of our normal schools is to fit teachers for the common primary and grammar schools of the state. We can from the office of Superintendent of Public Schools furnish at almost any time the applications of as many qualified teachers as are needed for all the public high schools in the state, those of St. Louis alone excepted. Our common district schools in the country are suffering for the want of improved teachers. It is the manifest duty of our normal schools to aim at the supply of this demand. Then we must arrange in such a manner, if possible, as to allow this partially fitted teacher, after a brief term of practice, to return to the normal and increase his stock of teaching material by another term of study."¹

The normal schools took up this task with loyalty and energy. While endeavoring to maintain standards by selective examinations for promotion and graduation, the institutions became genuine evangelistic centres sending into the highways for all who could be persuaded to come in. "However advanced, or however backward, students will be received and assigned to such classes as they are prepared to enter."² "The professional course is arranged to meet the wants of the most advanced students as well as those least advanced."³ "Come for a year if possible; if not, a single term will be of great value. While only brave, determined teachers will graduate, all will be greatly benefited." "Nearly all our students are from the rural districts and about nine tenths of them pay their own expenses chiefly by teaching in the public schools of the state. The institution is organized and conducted with special reference to this class of students."⁴ Such expressions abound in the catalogues.

The gospel was preached directly also. Joseph Baldwin at Kirksville records: "Each member of the regular faculty aims to spend all vacations in institute work. During the year I attended twenty institutes and besides gave a considerable number of educational lectures—traveling over six thousand miles. Professor Greenwood did nearly as much. For the most part we paid our own traveling expenses."⁵ James Johonnot from New York State, the second president at Warrensburg, rebelled at this, claiming that teachers needed the summer vacation for recuperation and further study;⁶ but he remained only a short time. His successor, George L. Osborne, and all his faculty, were as devoted apostles to the rural teacher as was Baldwin. The same spirit prevailed also at Cape Girardeau, where, as late as 1895, President Vandiver declared that "any teacher who draws a reasonable salary from the state during ten months of the year should be willing to spend two or three weeks of the vacation in bringing the cause of education before the people and showing them the advantages of the normal school."⁷ It was undoubtedly the Baldwin-Osborne energy that Missouri needed at this time, and a great debt is due these whole-hearted workers among the rugged and capable but uninstructed youth of the state.

¹ *State Report*, 1871, page 18.

² *Catalogue, Kirksville*, 1873-74, page 32.

³ *Ibid.*, page 15.

⁴ *Ibid.*, 1879, page 21.

⁵ *State Report*, 1872, page 166.

⁶ *Ibid.*, 1873, page 122.

⁷ *Ibid.*, 1895, page 90.

PREPARATION OF HIGH SCHOOL TEACHERS

Meanwhile preparation for advanced positions was by no means forgotten. As was seen above in the Kirksville prospectus, the students and graduates of the last two years were intended to become high school teachers or administrative officers, and this part of the school's plan receives frequent mention in the reports and catalogues. "While we labor to fit our graduates for teaching in graded and high schools, our principal efforts are directed to preparing teachers for the common schools of the state."¹ "It has been found necessary to organize classes in Greek to meet the wants of those preparing to teach in High Schools."² "The additional training offered in the advanced section is intended to qualify the full course graduate for teaching in graded and high schools. Our judgment in this respect is fully confirmed by the successful work now being done by graduates."³ "The classification, gradation, and management of graded schools is given special attention that teachers may be fitted for the best positions as principals, assistants, and superintendents."⁴ The state superintendent in 1871 found the tendency to do advanced work at the outset very strong. He says: "The Board of Regents occupies an unenviable position midway between the praiseworthy ambition of instructors on the one hand, and the clamor of the people for trained teachers on the other. The instructor, of course, prefers to turn out a finished job and is inclined to retain the pupil until he becomes fitted for a thorough high school teacher. No one can doubt that the highest possible amount of personal culture is desirable, even in the teacher of the primary school. But the people cannot wait long for something a little better than that which they now have."⁵

NORMAL SCHOOLS AND HIGH SCHOOLS

It will be worth while to digress for a moment at this point and note how secondary education in Missouri was chiefly built up — a consideration that may throw light on the relations existing between the normal schools and the high schools. In 1870 the number of tax-supported schools equipped to prepare students for the university, even with the low requirements of that period, was certainly fewer than ten, and these were in the chief centres of population.⁶ In the same year, however, the county superintendents report sixty-seven "high schools," of which doubtless a good specimen is described by the superintendent at Brookfield in Linn County a year or so later. He says: "In the higher department we have classes in algebra, geometry, physical geography, and Latin. I have as yet seen nothing in the school law that provides for the instruction of classes in those higher branches of study in our public schools. The policy may be questionable of taxing the public for the purpose of giving an academic education to the few who may wish to avail themselves of it. At present our school is attracting numerous pupils from other districts, and it has already become an insti-

¹ *State Report*, 1874, page 45 (Kirksville).² *Catalogue*, Kirksville, 1874-75, page 26.³ *State Report*, 1894, page 202 (Warrensburg).⁴ *Catalogue*, Kirksville, 1892, page 36.⁵ *State Report*, 1871, page 18.⁶ *Ibid.*, 1873, page 28.

tution of which our citizens may be truly proud.”¹ This is the situation in a nutshell: an intelligent, ambitious community, and a good grammar school teacher who had studied Latin; tentative beginnings without warrant in law; pride in the prestige secured in the surrounding region, and satisfaction in the tuition fees from outside pupils. In similar and smaller communities it seems probable that very many beginnings were made by enterprising teachers who could give instruction in the subjects requisite for a teaching certificate. Such centres as could supply this instruction became training schools for the whole region roundabout,² and these incipient normal schools—protuberances, as it were, on the elementary schools beneath—grew and finally took independent shape in one, two, or three year high schools. In the East the high schools were generally converted academies or were established fully formed on that model; in Missouri the typical high school emerged gradually from the vigorous elementary school.

It is evident from the nature of this development that such high schools as these, in so far as they were related to any higher institution, had their dealings with the normal schools where their teachers were prepared and to which many of their students went directly. As their advanced work became an established feature, the best of the elementary teachers were assigned to it; in fact, down to a late date the small high schools taught little else in their first year than grammar school subjects.³ The university, on the other hand, when it began to be conscious of the importance of high schools as feeders, took formal account only of those large schools that could prepare students for it. Some influence in behalf of the university was doubtless exerted by teachers in small schools who had attended the sub-collegiate training department that existed during this early period at the university, but these must have been quickly outnumbered by teachers sent out from the normal schools.

It can be readily understood, therefore, that the normal schools from their earliest moments, knowing of these scattered efforts to develop high school departments out of the elementary school, and aware of the intimate and natural relation that such efforts must bear to themselves rather than to the university, should consider it a part of their business to train these teachers, who at that time could really be trained nowhere else. In 1890, twenty years after our previous estimate, twenty-seven four-year high schools are reported, together with thirty-eight three-year and sixty-five two-year schools;⁴ no reference is made to the probably large number of elementary school centres where less than two years of high school work was attempted. By far the greater portion of this short course work was certainly done by teachers who, if trained at all, had graduated from the normal schools or had attended them; the relative proportions may be judged fairly enough from the present situation, when the normal schools are responsible for training forty-six per cent of the teachers in first class high schools outside of St. Louis and Kansas City; seventy-three per cent in second and third class schools; and seventy-six per cent in wholly unapproved schools.

¹ *State Report*, 1873, page 167.

² *Ibid.*, 1871, page 17.

³ *Ibid.*, 1900, page 27.

⁴ *Ibid.*, 1889, page 11.

With such an overwhelming personal interest and concern in these smaller high schools as is shown by the above figures, it would have been indefensible for the normal schools not to employ every means at their disposal to strengthen these teachers as much as possible. The same thing may be said of the smaller principalships and superintendencies.¹ Many a normal school graduate has succeeded as a teacher, and has stepped ahead into an administrative position, not because he had the ideal training for that position, but because there was no one with better training who would compete with him at that level. He felt at home in the normal school and would return thither for his further education; courses that would help him were the natural sequel, and under the circumstances cannot be fairly criticised.

HIGH SCHOOLS AND UNIVERSITY

As the normal school's sphere of influence developed upward with the rapid growth of the high school system in the manner above described, the university was almost as rapidly extending its own territory. For accredited schools, inter-university and associational agreements determined certain standards of qualification for instructors which the normal schools could not meet; unaccredited schools desiring eventual recognition sought to reach the university standard, to the prejudice of normal-trained teachers, and it became evident that if the normal schools were to hold what they had come to consider their own, an entire readjustment must be made. The agitation for this readjustment has filled the years since 1900 and deserves special notice.

READJUSTMENT OF NORMAL SCHOOLS FOR HIGHER INSTRUCTION

After disposing of their elementary or "sub-normal" work, the normal schools, in 1904, took the first radical step in raising their curriculum from the previous four-year high school level. It was mutually agreed to organize their work on an eighteen-unit basis, and to allow a credit of ten of these units for a four-year high school course, thus making it necessary for a high school graduate to complete eight units, or regularly two years of work, for a diploma and a professional degree. This brought the last two years of the normal school parallel with the first two years of the college or university, and left a gap between normal and elementary school that was variously bridged. In the same year the University of Missouri organized its School of Education, primarily for the training of high school teachers and supervisors, and the normal schools at once announced their proposed competition by offering to give the degree of A.B.² The immediate motive for this action is said to have been the failure of negotiations for the acceptance of normal school credits by the university. That it

¹ Sixty-nine per cent of the superintendents in towns having first class high schools in 1915 had attended Missouri state normal schools. In second and third class high school districts eighty-five per cent had attended normal schools. Among the latter are counted the principals of the schools where there were no superintendents. See page 376, note 4.

² All catalogues, 1904. At Warrensburg this proposal was withdrawn in 1905, but was introduced again in 1907. Cape Girardeau had offered the A.B. degree since 1902.

had been in mind for some time for other reasons, however, is clear from the statement in the report from Cape Girardeau to the State Superintendent in 1901: "The normal schools must offer a full college education. They must reach that standard gradually, but the purpose should be plainly stated to make them in a few years normal colleges."¹ The Kirksville catalogue of 1903 discusses the question as follows: "The normal school finds itself compelled to give other and higher courses. For the past two years there has been a constant and increasing demand for graduate (*i.e.* third-year) courses. At this time thirty persons holding diplomas of normal schools and colleges are working in our various graduate classes. Twenty-five of these are graduates of our own four-year (*i.e.* two-year college) courses. They claim that the instruction which they can get here is more concrete and better adapted to their purposes than the instruction which they can get elsewhere."²

All of this, together with the formal establishment of a full college curriculum in 1904, would seem to indicate a considerable call for advanced work. Yet in spite of the "demand," it was not until 1907 that Kirksville first succeeded in graduating a single student from this course, and one more was given the degree in 1908 after graduation from another institution; none appeared in 1909. Eight years (1904-12) were required to give nineteen students the four-year degree; even of the "thirty persons in our various graduate classes" reported in 1903, only four appear to have taken the three-year diploma in that year. Cape Girardeau did somewhat better, graduating twenty-seven in all by 1912, and thirty-six since that time (1913-17). Kirksville graduated one hundred forty-four from 1912 to 1917.³

RESULTS OF REORGANIZATION

In general it may be said that the schools have been able to provide but a minimum of genuinely advanced work for four-year graduates, most of their courses being necessarily taken with freshmen and sophomores and some even with secondary students. Where advanced work was offered, the teachers in charge, while generally capable, have not had the training reasonably expected of competent directors of junior and senior college work, and have had almost their whole experience with secondary or early col-

¹ *State Report*, 1901, page 53.

² *Catalogue, Kirksville*, 1903, page 12.

³ The movement for granting bachelor's degrees has been confined largely to Cape Girardeau and Kirksville. Warrensburg has participated, but to a smaller degree in proportion to her much larger enrolment. Fifteen had taken the degree at Warrensburg up to the time this study was begun in 1914; forty more had graduated by 1917, making fifty-five in all. Of these slightly over half came from the county where the school is located—all but three from the town of Warrensburg. Of the sixty-three graduates from Cape Girardeau, nine were from the faculty or their families, while twelve lived in remote parts of the district from which the university or some other good college is equally or more accessible; forty, or sixty-three per cent, including the faculty group, lived in Cape Girardeau or close by, leaving ten, or sixteen per cent, to represent the accessible part of the district at large. One came from another state. At Kirksville eleven were regular members of the faculty at the time of taking the degree; eight of these received degrees without doing work in residence. Nearly three-fifths of the four-year degrees granted, 1907-16, were secured by residents of Adair County. The residence of later recipients was not published. Reports from the school indicate forty per cent of local graduates in 1917 and 1918. Maryville granted her first four-year degrees in 1917, when twelve students graduated; fifteen graduated in 1918. Of these twenty-seven students, eighteen lived in Maryville or close by, and three lived in adjoining counties; two others were already college graduates, and nine were paid various amounts by the school as assistants. Springfield graduated one in 1913 and twenty-eight from 1915 to 1917. Ten of these lived in Springfield or the immediate neighborhood; seven came from outside the district, and five were regularly employed members of the teaching staff.

lege classes. Thus it has resulted that graduation from a four-year course has been merely a matter of amassing a sufficient number of elementary credits of an almost unrestricted variety,—a practice disapproved by all reputable colleges,—instead of representing definite progress in sequence thru an organized curriculum which is required by good collegiate procedure. A third characteristic calculated to cheapen these courses has been the pace at which they have been taken. Cape Girardeau, running nominally on a schedule of fifteen credit hours per week, has permitted an actual median of seventeen hours for the collegiate student body with still more for a very large proportion, and in addition has allowed a differential bonus by which the two highest ratings earned respectively fifteen and thirty per cent more credit. At Kirksville this speeding-up has taken the extraordinary form of a private and arbitrary distribution of credit, based solely on the personal judgment of the head of the institution.¹

In view of these conditions, it is not surprising that the University of Missouri should decline to accept hour for hour the work of the degree courses in these institutions until some arrangement for acceptable standards of work could be made. Since this study began, such an arrangement has been achieved, and the conference agreement of June 22, 1916, stipulates these standards and provides for full mutual recognition of credit. It now remains to be seen to what extent the normal schools can meet university standards for advanced collegiate work on their present appropriations and at the same time provide satisfactorily for the secondary and junior college work that is expected of them. The large increases in the one hundred twenty hour classes in 1917 and 1918 are admittedly due to the new arrangement. Fairness to their students should therefore inspire the schools to enforce their revised standards to the letter.

At the present time, as in their early careers, the Missouri normal schools regard their efforts as properly catholic in scope and as destined to comprise the preparation of every sort of teacher "from the highest to the lowest." The idea is clearly stated in one of the catalogues for 1916: "The function of the normal school is to prepare efficient teachers for all grades and classes of public schools including primary teachers, rural teachers, grade teachers, high school teachers, principals and superintendents. To limit it will of necessity make it less efficient at all points."

2. HOW SHOULD THE SCOPE OF A NORMAL SCHOOL'S ACTIVITIES BE DETERMINED?

For a professional institution already in operation the question of the ground to be covered is a double problem of resources and needs. This assumes, however, that the character of the proposed curricula and their cost are already fully understood. The first and fundamental question to be answered should be: What does it imply in number and quality of instructors, in equipment and organization, to give in a first class manner the kinds of training in view? and the next: How many of these

¹ See page 333.

kinds of training can we undertake with the funds at our disposal? and the third: Considering the types of teacher needed, and the other agencies supplying them, in what direction, if at all, is it advisable for us, as experts in state education, to urge the extension of our facilities? The precedence which an institution actually gives these questions in regulating its operations is a very fair measure both of its sense of obligation to the state and of its right to be considered a good higher institution.

"STANDARD" INSTITUTIONS AND OTHERS

It will, of course, be granted that past and, to some extent, present conditions in many localities interfere seriously with the normal school that would do standard work; the need is often such that apparently the only justification for a school's existence is for it to spread itself out over the whole field, and help every teacher who applies to be a little better than he was before. Informal efforts of this kind are desirable and necessary; with reading circles, correspondence work, and other loosely organized schemes for self-improvement they have a well-earned place. The trouble comes when such a Chautauqua-like institution loses its power of self-recognition, and announces that its all-inclusive achievements represent the best that men know; when it seeks to match its uncritical attitude and promiscuous procedure, however well intended, with institutions that meet national standards.

A certain school, for example, decides that with its funds it is justified in offering three standard curricula: one for teachers in grammar grades, another for teachers of intermediate grades, and the third for primary teachers. It maintains a faculty of instructors especially trained and experienced in these departments; it pays them \$2500 to \$3000 a year, employs them fifteen hours per week, and provides opportunity without loss of salary for their occasional release for study. It discriminates in its admissions to the curriculum, selecting only those students who are well prepared; it requires continuous attendance upon instruction in fair-sized homogeneous groups thru a series of courses organized to give thorough training for specific positions. Such a school deserves to be called a "standard" institution, since it is doing its work under conditions known to be excellent. Another school with the same amount of income offers to train teachers of every kind. It has a staff some members of which receive fair salaries, but which includes many of its own recent graduates and even advanced students who are teaching for credit at low figures. The educational equipment of most of these instructors is "general;" in many cases their only experience is that of superintendent in a small town. Shifts from one department to another are not uncommon. Teachers must instruct for twenty-five periods per week, in the summer session sometimes for thirty-five, and take time off at their own expense, if not at their own risk. There is no specific entrance requirement for students except a general "sizing-up" at the office; students, if sufficiently plausible, may take most of their high school work while going thru the "college." To accommodate one-term students, courses are organized in twelve-week or even six-week fractions, which may be taken topsy-turvy,

whenever students feel like coming. Nearly everything is elective; the same classes admit alike those who will teach in primary, those who will teach in intermediate, and those who will teach in grammar grades, as well as others who will seek high school positions or principalships, and still others who are piecing together four years of such courses for an "A.B." Secondary and collegiate students recite together; as many courses as possible are therefore "general." Such courses are likewise justified on the theory that no one can tell until after two or more years of this treatment just what it has fitted him for. Experience proves that he takes the highest paid job of any kind that turns up, regardless of his "training." To cap the climax, this school has the courage to assert that its performance is as worthy as the best, and to demand equal recognition.

These two examples illustrate a contrast in fundamental conceptions of education. Given the same amount of income, the first school is its own severest critic at every point, while the second criticises only those who attack it. The first asks always, "What is a suitable and adequate training for this position?" and "Can we provide this with our resources?" The other enquires first, "Is there anything that any normal school or college gives that we do not offer?" and then declares, "Let us advertise it, and give as much of it as we must so far as this requires no additional facilities or expenditure." One is a genuine moral leader, limiting its program strictly to that wherein it can express the whole truth; the other is a popular and superficial educational exploiter.

Hence, if there is virtue in doing a thing thoroughly well and a limit to legislative appropriations, it is impossible to endorse the above quoted declaration that to "limit" a normal school in any way "will of necessity make it less efficient at all points." We justly view with increasing suspicion individuals and institutions that multiply their avowed aims while their resources remain the same; normal schools can be no exception. In every other form of human effort, to limit and concentrate is to strengthen and achieve. No better illustration of this could be found than the Springfield school; more than ninety-nine out of every one hundred enrolled there have received the strictly limited type of training in which the school is strongest. The product has been relatively sound because the bulk of the effort has been expended on the one thing that the school is best fitted to do. Universalists in speech, they have been for the most part unitarians in practice.

THE PRESENT POLICY OF MISSOURI NORMAL SCHOOLS—PRESSURE OF LOCAL SITUATION

The real explanation of the announced policy of these schools is complex, but is not difficult to determine. It is partly traditional. As already indicated, the earliest programs professed to fit for all positions successively. The schools found that their graduates, however slightly trained therefor, actually rose to high school and administrative positions, and they sought to promote this with appropriate courses available by the way. These were frankly makeshifts to help a teacher climb, say, from the seventh grade to a high school position. The schools wisely made no pretence at an or-

ganized curriculum to ensure a teacher fully competent in high school subjects, for their main stress was elsewhere; they simply did the best they could, and let the low salaries of the positions justify the inadequacies of preparation. But the "universal" tradition was started, and the leap from these incidental efforts to four-year college courses purporting to give an organized training for higher teachers in accordance with collegiate standards both of curriculum and administration, was made in the dark without knowledge of what was involved.

EXAMPLE OF OTHER INSTITUTIONS

Again, the present attitude may be ascribed partly, in some institutions at least, to a sort of quasi-compulsion. It is not easy, in dealing with an indiscriminating public or a jealous local board, when sister institutions in the same or in neighboring states are loudly advertising their A.B.'s and B.S.'s, to convince your constituency that such a course may be undesirable for you. The reproaches, too, from one's professional colleagues of disloyalty to the normal school "cause" in its "fight with the universities" are often keen. Warrensburg, altho the largest school, has had until recently almost no graduates above the second year of college work. It developed its regular curriculum intensively, and probably would have preferred to wait until longer curricula could be placed on a thoroughly sound financial basis. At Springfield and Maryville this would possibly also be true, had not Kirksville and Cape Girardeau aggressively asserted the other policy.

EXPANSION A MATTER OF PRIDE

A third contributory motive appears in the following quotations: "It is impossible to prevent ambitious young teachers from working up from the elementary schools to the high schools. It is impossible for the normal schools to command the respect of teachers if their graduates are thus limited."¹ "If it were established and understood that our normal school graduates were not to be accepted as high school teachers nor considered eligible for small principalships, we should soon see none but the poorest talent presenting itself for entrance at the doors of these institutions. Strong people would go elsewhere."² If we mistake not, what speaks here is an institutional pride that balks at the acknowledgment to its patrons that there is anything the institution cannot do for its students. In so far as this attitude is not one of mere self-aggrandizement, the normal schools would seem to be the victims of conditions about them — conditions which in turn are fostered and aggravated by the policy of the schools. Promotion has filled the eye rather than fitness for a given position — the future of the individual rather than the advantage of the school in which he is to teach. The economic situation and the certificate regulations have permitted this, it is true, but it is none the less deplorable that a student with a minimum of specific preparation for elementary work should be allowed, thru a series of years, to fill his pockets out of that

¹ *State Report*, 1901, page 53.

² *Ibid.*, 1897, page 29.

job while he is seeking training for a high school position, a principalship, or for business. The presence of this type of student has enlarged and flattered the institution, but it has placed it in a false light. Students ostensibly preparing for elementary work suddenly appear in something wholly different or leave the profession, and the normal school is directly responsible. An oft-repeated argument in Kirksville catalogues in behalf of the four-year college course is that elementary schools need as well-trained teachers as the high schools—a thesis that all sincere students of education have long endorsed. The subtlety of it in this case appears when it is seen that the school offers no three or four year curricula for elementary work, and that such graduates uniformly, and the two-year graduates usually or very often, go into small high schools or into principalships and superintendencies, to the palpable satisfaction of the normal school authorities. Apparent enthusiasm for the downtrodden elementary school thus eventuates in a college for high school teachers and superintendents. The almost inescapable danger here is a two-fold mediocrity: a skimmed preparation for elementary teaching and a higher training that cannot be first class. The knowledge of this fact is no critic's secret. Student opinion on the point could not be exhaustively tested, but in the few cases both at Cape Girardeau and at Kirksville where opinions were secured, the students, altho in general loyal to the school, felt that its higher degrees were not desirable. Only one, a Kirksville graduate, felt resentful at having his A.B. degree from the normal school heavily discounted at the university, altho he admitted receiving credit at the normal school for five specified courses he had never taken. One is puzzled to see how "respect" for such training is an asset to any institution. "Strong people" certainly will go elsewhere under such circumstances, and only those will remain who fail to grasp the situation, or who by extravagant rewards of credit, as at Kirksville, are deluded into thinking they can save much time. On the other hand, we have innumerable instances throughout the country of normal schools that have set themselves to do a limited task well and which, precisely because of that fact, are plentifully provided with high grade students. Certain it is that the only sure way for an institution to deserve the respect even of its own graduates is to convince them of its integrity and provide them with a training, however limited, of which they need not be ashamed anywhere.

PERSONAL EXPANSION

There is, however, another phase of this motive, latent in many institutions and active wherever an ambitious and not over-scrupulous organizer finds a malleable board and a free field. The motto of this purpose is, "A big institution," behind which lurks the hoped-for inference, "A big president." The method is first to construct a "demand" and thereafter to expand the school to meet it. If skilfully undertaken, a "demand" may be constructed in a few hours by putting into the mouths of several patrons or school boards cordial agreement with the far-sighted suggestions of the president, and presently the whole student body may be discovered by the same method

to be clamorous for a new department or degree even tho not one of them remains to take it. "Our students demand" or "Many letters from school boards urge" is a flexible sort of evidencethat needs seldom be produced. Of course such "appeals" are "irresistible" and "must be satisfied," the ultimate victims being students usually ignorant of any other institution and without means of judging the true worth of what they are getting, students who are flattered by being urged to stay on for "advanced" work. Nothing is easier than to impose on students in this fashion. The method followed is to suppress all criticism; if the school gives a course, it is *ipso facto* the best course that can be given in that subject, and ranks with any course by the same name anywhere. In spite of meagre equipment and their own hesitation, teachers are led to regard it as a species of disloyalty to suggest to students that they can take advanced work more profitably at other places. Blind faith in the familiar institution becomes a shibboleth to young minds. The school literature is an instrument of blatant self-adulation or bombastic compliment: American schools are "considerably better than those in England, France, and Germany;" those in the region concerned are "as good as any to be found anywhere in the world;" the school itself is always a "great" school; its faculty "represents the training of many great universities," including the "University of Leipsic and University of Würzburg;" whereas fewer than half of the teachers have even bachelor's degrees from a first-class institution, over a quarter having the questionable degree of the institution itself. As for students, "graduates of eastern universities come here to school"—this on the strength of a local graduate who had been East to college and who, returning to his home in the school town for the summer, registered for a casual course that attracted him. A course in surveying tempts young men under the guise of "Engineering;" the first essays at animal husbandry parade as "Thremmatology;" while "Farm Machinery" from a textbook and expounded by a student just graduated from the school sounds as important and receives as much local credit as the course at the university given by trained and experienced men in an extensive laboratory. Meantime the doctrine of "sound scholarship," the "highest attainable standards," and so on, is set forth with great unction, while "Democracy in Education" glorifies, and perhaps grimly justifies, the whole.

A decent regard for honesty and justice revolts at this. There is possibly no objection to a state's supporting an institutional plaything for one individual if it wishes to do so, but to jeopardize the future of its young students by exposing them to continued misrepresentation is another matter. A student in a state-supported institution is entitled at any time to candid and accurate information with regard to the current value of the work that he is doing, both in individual courses and in his curriculum as a whole. The curse of the old private educational enterprises lay in the commercial interest felt by the institution in retaining the student as long as possible; state education is in a sorry plight if it duplicates the same vice and for a still more ignoble purpose. It should be the distinctive feature of a state system that, however much or little it can offer its citizens, it can at least give them reliable

and disinterested counsel. Its schools should make it their first duty to say: "The instruction that you need is given best at X; we offer it here for those who cannot go elsewhere, but we lack the proper facilities." They will then beget confidence when they say: "This other thing we do, so far as we know, as well as it is done anywhere." A student so counseled not only shapes his career successfully according to national standards, but has had from both state and institution a priceless lesson in downright intellectual honesty.

SERVICE OF NORMAL SCHOOLS IN ENFORCING THE IDEA OF PROFESSIONAL TRAINING

Finally, the normal schools have been moved by another consideration which goes far to justify their whole position. Their contention has been that "there can be no harmony or unity in the education of a teacher if his scholarship is received in a college where he is trained to be indifferent to, if not positively antagonistic to, the pedagogical training that he is expected to get in the normal school."¹ The same writer urges that as colleges and universities will not grant proper credit for work done in a normal school, "teachers must get their scholarship and their pedagogical training in the same school." The successful normal school director has seen intensive professional training for elementary teachers bear remarkable fruit; he knows that the graduate of our best normal schools is capable of giving instruction that is amazingly superior to the teaching of the college graduate who is without professional training. He knows this to be due to the persistent conservatism of college and university with regard to scientific education. Therein it is impossible not to agree with him. With the same skilful selection of teachers, the same discriminating admission of students, the same careful construction and administration of its curricula, the same thorough testing and practical training of its candidates, that are now characteristic of the best training schools for elementary teachers in this country, the teachers college of the future will abundantly justify its existence, and will usher in the really professional secondary instructor.

CRITICISM BY UNIVERSITIES PARTLY ILL-FOUNDED

The past and present situation, however, deserves further analysis. The reluctance of higher institutions to accord full recognition to the work done in normal schools has been of a twofold character: In the first place, they have seriously questioned the right of the study of education to a place among other accepted subjects of scientific instruction and research; in the second place, they have questioned whether individual normal schools were conducting that study in a fashion entitled to the credit of which the subject itself might be worthy. In so far as this hesitation has been sincere and not the result of prejudice or institutional feeling, it has been wholly proper. The first objection has borne with equal weight on departments of education within the colleges and universities themselves, and has not yet wholly disappeared. It has

¹ *State Report*, 1901, page 171.

compelled the newcomer to fight for his place, and has thereby required him to refine and improve the organization of his subject in order to defend it against concentrated criticism. It has but repeated the history of every new claimant for academic approval, that, for example, of the study of science or history, or, more recently, sociology. In all essential respects, however, this fight for admission has now been won. The department or school of education has achieved freedom and dignity in an ever increasing number of higher institutions. Moreover, the work done by good normal schools shows marked similarity in spirit and method to that performed in college and university centres. The ideals of the profession, and of professional training, as now set forth by the best representatives of both types of institution are virtually identical.

The second objection, however productive of bitter and often justifiable resentment, was also inevitable. It should be remembered that at the date of the quotation cited above (1901), the Missouri normal schools were, by their own admission, little more than high schools; they admitted students at the age of fifteen practically from the elementary school; it was yet three years before their advanced curriculum was made even nominally to parallel lower class college work. Surely any wise college administrator would think twice before allowing full value to untested transitional credit of this sort. Add to this the later administrative practices, such as those at Kirksville, that would admit a student at thirteen, allowing him at fourteen to begin earning "college" credit, and to keep "college" and high school work parallel for from two to five years, and any self-respecting college would reject the entire institution at once.

It is true, however, that all along much excellent work has been done for which credit in other institutions could not be secured. The spectacle is instructive: six wholly autonomous state institutions doing to a certain extent the same work, each standing on its rights and dignity and keeping the others at bay for a dozen years, simply because there was no agency that could step in, investigate the trouble, and secure an understanding! The institutional spirit of fifteen years ago was not the coöperative spirit of to-day. "The longest pole gets the persimmons" was the university's reply to one normal school president when seeking an agreement, and general competition was the result. Under these circumstances, the normal schools took the surest way to forfeit the confidence of their more advanced rivals. Subject to no inspection or critical review, they begged the question in the easiest manner by claiming to do everything, and thereby made a pedagogical blunder that retarded their cause and the reputation of professional training as much certainly as the conservatism of the university ever did. If, while agitating vigorously, they had first pushed for high intensive excellence in their regular work, matching or surpassing therein the college when measured by its own standards, and had then slowly added what they could fully maintain, the past decade of their inter-institutional relations would have been totally different. Instead, the catalogues reverberated with proposals that every one knew had no basis either in suitable instructors or in necessary appropriations, to say nothing of students; meanwhile the change in policy and the new emphasis which

was attempted could not fail to injure the relatively less advanced work which the schools were obliged to maintain.

These efforts at expansion have been unfortunate for another reason. Normal schools, unlike law or medical schools, profess to stand primarily for the processes of sound education in general, and to reveal by precept incorporated into practice the true morality and economy of mental growth; when a normal school or school of education sacrifices this honor, it abandons its most precious and characteristic trust.

THE SCOPE OF AN INSTITUTION'S WORK SHOULD BE DETERMINED IN VIEW OF ALL THE FACTS

If the above analysis is correct; if the normal schools have too lightly undertaken a serious responsibility because others would not meet it properly, or because they themselves sought the prestige involved, or because they regarded it as their traditional right, or because other normal schools were expanding, the inference is not that normal schools should not enlarge their scope. To be sure, none of these grounds, except possibly the first, can be considered valid. If training for high school teachers is not well given elsewhere, it is by all means the duty of the normal schools to agitate and, if necessary, to appeal for funds sufficient to enable them to do the work in a suitable manner themselves.

There may be other valid grounds. Whether there are or not is the third problem that confronts a school, after it has determined what standard training is and what surplus funds, if any, it has for extension. These latter questions concern each school alone; but the problems of functional enlargement, restriction, or readjustment are matters that can be properly determined only in coöperation, as they depend wholly on the needs of the state viewed in the light of the performance of all of its agencies taken together.

Coöperation of the sort here contemplated demands a definite, intelligent, and responsible procedure. Here, for example, is a school that has never given a four-year degree, but has administered two-year curricula excellently. Shall the president, emulating the example of others, get together by hook or by crook a group of three or four students whom he can persuade to stay thru in order to give the school the mystic blessing of a "four-year class"? We have already seen the kind of fraud on the student that such an attempt may perpetrate. Or shall he be required to take his proposal before his colleagues, say a board consisting of the heads of normal schools and of the university school of education together with the state superintendent? Shall he be asked to show why his candidates would not be much better off, both as individuals and as eventual servants of the state, at another normal school already doing acceptable four-year work, or at the university? If, after prolonged and thorough investigation by this group, it became plain that the university and four other institutions with organized standard four-year curricula were unable to supply the demand, and that there was the prospect of substantial attendance on such work in the fifth school, this executive could have the support of tested and trustworthy evidence

in asking funds to establish his new curriculum in a proper way. Anything short of such carefully considered action is a failure in educational planning.

ORGANIZATION OF CRITICISM NEEDED

There is no limit to which the continual joint expert study of this functional growth and readjustment should proceed. It is far more important than the unification of material administration thru a single board, altho undoubtedly it would be much facilitated thereby. The executive heads of these institutions are the state's selected agents for dealing with its teacher supply. The latter is a growing, shifting, never ending problem quite beyond the successful grasp of laymen. The logical and necessary thing is to require these gentlemen as a single body to regard the state's problem as their own in its entirety, and not, as at present, as a districted problem which each may dispose of at will. In this manner each president should become, in a way, president of the whole, and see his particular institution as part of the whole organism.¹

¹ See page 56.

VI

PERSONNEL OF THE MISSOURI NORMAL SCHOOLS

A. TEACHERS¹

AGE, SEX, AND PARENTAGE

IN its five normal schools the state maintains some two hundred instructors. Nearly one-half are women. Two-thirds are under forty years of age, the median age of the women—thirty-three—being some five years less than that of the men. About two-thirds also are of American parentage, and nearly one-half were born in Missouri. Of the men two-thirds came from agricultural, one-sixth from professional, and one-tenth from commercial families. Of the parents of the women one-third were engaged in trade, slightly less than one-third in agriculture, and one-fifth in professions.

EDUCATIONAL EQUIPMENT

Concerning the education and experience that may be determining elements in a teacher's success, only the more general facts, such as institutional attendance, degrees, and years of various kinds of experience, are statistically measurable. These are, however, most suggestive. In the case of an occasional individual they may be misleading; some unschooled genius may tower in ability above a man with many degrees. Nevertheless, other things being equal, twenty college graduates are practically certain to excel any similar group composed of those who have graduated from high school only. Moreover, such facts become increasingly trustworthy the larger the group.

Remembering how home environment affects the choice of a profession, it is interesting to find that four-fifths of the men and about seven-tenths of the women who teach in the normal schools of Missouri come from families that include other teachers.² As the same thing is true, altho to a smaller degree, of the state university and college teachers, and also of prospective teachers now in the normal schools,³ with the exception of Harris Teachers College at St. Louis, one appears to be dealing here with a distinct vocational characteristic,—families that already include teachers are likely to provide others; teachers in general represent families to which school affairs are more or less familiar.

SECONDARY AND HIGHER TRAINING—DEGREES

Secondary education in one form or another has, of course, been completed by all normal school teachers. Two-thirds received their training in the public high schools; nearly one-sixth received their secondary training either wholly or in great part in academies or in the secondary departments of normal schools or of small colleges; and the remaining sixth experienced various combinations of such schools.

¹ For a description of the data upon which the statements in this section are based, see pages 401, 402.

² See page 419.

³ See page 432.

Higher education is recorded chiefly in the number, kind, and source of the degrees received. Twenty-nine per cent of the teachers have no four-year degrees, the proportion varying from fifteen per cent at Kirksville¹ to forty per cent at Springfield and Maryville. Of the teachers who lack degrees, one-fourth give no record of work beyond the high school, somewhat more claim three or more years of such work, while nearly half claim two years or less. The departmental assignment of the teachers having no degree is of interest. More than half—thirty-two out of fifty-eight—were teachers of art, music, physical education, or commercial subjects. The lack of a degree in such cases is easily explained, altho perhaps its justification is not so simple. Those who instruct students of college grade should themselves have had college training. But seven teachers without degrees were teaching academic subjects, chiefly language; eleven² were engaged in supervision of practice teaching, and eight in giving courses in education.

This reflects a characteristic weakness of the normal schools. One would expect these schools to require, even for their teachers of arithmetic and grammar, at least as well-trained teachers as are demanded by good high schools. This indeed has been the tendency. But while the academic departments have been steadily strengthened by better formal preparation, the professional and supervisory departments have been conducted more largely on the basis of experience unsupported by theoretical training. Nor is it a question of elderly teachers inherited from an old régime; the median age of these deficient teachers is thirty-three. It is certainly unfortunate that eleven out of the fifteen teachers in all the schools who were responsible for the critical task of directing the candidate's first practical efforts in teaching, and that eight of the thirty-three teachers giving professional courses possessed an academic training inferior to that of some of their students. These are the departments of all others where it would seem fitting for a normal school to lay stress upon something more than an empirical attitude toward "method." Supervisors of practice teaching should be among the best trained people on the staff, both in theory and in practice, if a normal school is to justify reasonable expectations, and instructors in professional courses should manifestly outrank all others in equipment and ability. Students seriously expecting to teach feel instinctively that practice courses constitute their most indispensable work; and the schools will not measure up to their responsibility until they place the most competent and best paid instructors in this department.

As a justification for partly schooled instructors it is weakly urged that mere degrees or years of attendance at institutions are no proof of ability to train teachers, and individual cases have been effectively cited to support this contention. Such argument is no refutation of the fact that a thorough education is an indispensable basis

¹ It should be explained, however, that Kirksville provides degrees of its own for many of its degreeless teachers while they are drawing full salary as instructors. In the faculty of 1915 six, or thirteen per cent, had received such degrees without resident work. Omitting these, twenty-eight per cent lack degrees—about the same proportion as at Warrensburg and Cape Girardeau.

² Fourteen, if the Kirksville degrees above referred to be omitted.

for success in any grade of professional instruction, and that education can be best ensured at good institutions. Further, the requirement of a degree is some safeguard against a lackadaisical habit of many teachers who are always professing to study, but who never carry their work to a successful conclusion. That these facts have been openly or tacitly recognized at the institutions themselves is shown by the steadily increasing emphasis upon a satisfactory institutional qualification for appointment.

DEGREES CLASSIFIED

The teachers who have degrees representing four or more years of study beyond the high school have been classified¹ to show not only the number of those holding the various degrees, but also, in a rough way, the quality of the degrees held. For this purpose use has been made of the classification of institutions formulated by Dr. K. C. Babcock for the United States Bureau of Education in 1911.² Whatever the merits or defects of this classification, it at least treats all schools measured by it alike, and the results secured by applying it, as has been done here, to the state university and to a good St. Louis high school, are of interest. Seventy-one per cent of all normal school teachers hold four-year bachelor's degrees, as compared with ninety-two per cent holding such degrees in the university and eighty-two per cent in the Soldan High School. Only thirty-nine per cent of the normal school teachers hold their bachelor's degrees from first class institutions as compared with seventy-four per cent at the university and sixty-five per cent at the Soldan High School.

The situation in the individual schools may be traced at will; Cape Girardeau heads the list with forty-eight per cent of its staff equipped with first class bachelor's degrees. If only the various kinds of degrees be considered, regardless of duplication, Maryville leads with eighty-three per cent of all degrees in classes one and two. Maryville also has the highest percentage of advanced degrees, all of them but one from first class institutions; yet in the proportion of the faculty having any degree it is low. Kirksville is lowest by this analysis, having sixty-nine per cent of all of its degrees in the first two classes; its advanced degrees are all from high grade schools. In the proportion of first class degrees of all kinds the figures run from forty-two per cent at Springfield to seventy-five per cent at Cape Girardeau—five per cent below the Soldan High School at St. Louis!

It may be urged that the quality of an institution is no certain guarantee of the quality of the individual who goes thru it, and in the case of any single individual this will be freely admitted. It is not true, nevertheless, that, other things being equal, fifty graduates of inferior institutions will represent a training that approaches that of fifty

¹ See page 420.

² This is substantially the classification later adopted by the Association of American Universities. Class I includes institutions of such grade that their graduates would generally suffer no loss of time by transfer to admittedly standard institutions (Columbia, Harvard, Yale, etc.); Class II includes schools whose average graduates would transfer to such institutions with the loss of part of a year; Class III indicates a loss of one full year, and Class IV of practically two years. Class V comprises all other schools and includes the four-year courses of the Missouri normal schools.

graduates of first class colleges. The low grade school, thru its inferior selection of material, its weaker faculty and equipment, and its looser tension of intellectual performance, exercises an influence that only the exceptional student will overcome. The graduates of such schools may perform a devoted and worthy work, but when the institutions so served place themselves in competition with other institutions, this point assumes importance. There can be but one conclusion respecting the normal schools in this regard: they are weak.

GEOGRAPHY OF TRAINING

Not only the rating but the location of the institutions that serve as a given school's intellectual progenitors is significant. There is a marked difference between the institution where, by inheritance, the limited ideas and attitudes of that particular institution or locality prevail, and the school that invites and provides for a generous renewal and invigoration of its mental life by accessions from abroad. Certain inferences on this point may be drawn from the facts before us. Including the four-year degrees from normal schools, fifty-five per cent of the bachelor's degrees held by normal school teachers were from Missouri schools, as were also over two-fifths of the advanced degrees. The university issued one-fourth of the first and nearly one-third of the second.¹ The women teachers are far behind the men in amount of graduate work done, and do a much larger share of it in Missouri. The individual schools vary greatly. Maryville has but one Missouri normal school degree, while nearly a third of the Kirksville bachelor's degrees are such. Most of the graduate degrees held at Maryville, also, were taken outside the state, while at Springfield they are largely from Missouri. It is perhaps noteworthy that at Kirksville and Cape Girardeau, the two schools at which competition with the university has been most in evidence, much of the graduate work of the instructors has been done at the university; at Kirksville this is true to the extent of sixty-four per cent.

The institutions outside of Missouri most frequented by normal school teachers for various degrees were University of Chicago, Columbia University, Brown University, and the universities of Michigan, Indiana, Kansas, and Wisconsin.²

COMBINATIONS OF TRAINING

From a purely institutional point of view the variety of mental background to be found in the faculty of a normal school appears in the combinations of training. A table³ of these data unravels certain strands of influence in a suggestive manner. The mode—one-third—among women teachers includes normal school with college training; while the mode among men teachers—thirty per cent—shows college and graduate work only. As the men are more frequently heads of departments, directors of training, and so forth, this largest single combination in their training is noteworthy,

¹ Half of the bachelor's degrees from Missouri schools came from the university and nearly one-fourth from the normal schools.

² See page 422. ³ See page 422.

and indicates how closely the university and the normal schools have interacted. The table shows a further fact: whereas the university has developed a fairly homogeneous form of training for its teachers, the normal school corps is drawn from a wide series of combinations; seventy-four per cent of the university teachers have one sequence of educational experience, namely, high school, college, and graduate work, while the largest group of normal school instructors having the same kind of training contains but twenty-three per cent of the whole number. This same wide variation appears also in the experience of the two sets of teachers.

Altho all members of a normal school staff, both those native to the state and newcomers from without, may be expected to acquaint themselves with the school conditions into which their students are going as teachers, it is doubtless commendable that a considerable proportion should have that knowledge bred in the bone thru personal experience. For the good of the school, however, natives of the state who have passed thru its elementary and secondary system should include in their college or university training a considerable period of work amid other surroundings. For this a summer session elsewhere is not enough. Where such migration does not occur there is certain danger. Forty per cent of the normal school teachers had both their secondary and higher work in Missouri, while thirty-two per cent were native born and had not left the state previous to receiving their first degree. This proportion does not appear excessive.

GRADUATE DEGREES

Only about one-fourth of the teachers in Missouri normal schools had ever done recognized study beyond a college course, altho nearly all of them were giving collegiate instruction. Of fifty-two master's degrees, forty-two came from first class institutions; twenty-two were taken in Missouri, sixteen of them at the university. Of the degrees usually considered as necessary to qualify a teacher to give collegiate instruction, there are seven among the one hundred ninety-nine teachers and officers, six of them taken from first class institutions, all outside of the state.

RETARDATION IN TRAINING

The retardation of normal school teachers in securing their education deserves special attention. The records of the group show that sixty-eight, or just under half, of all the four-year bachelor's degrees with date given were taken after the age of twenty-five. Allowing thus three years beyond the normal age of twenty-two as a reasonable margin, forty-seven per cent of the women and fifty-six per cent of the men were belated. Eleven of the twenty-one teachers who have only the two-year Ped.B. degree were belated in getting it. The interpretation of this situation may be aided by comparing similar figures at the university, where eighty-four per cent of all bachelor's degrees were taken at the age of twenty-five or under. At the normal schools thirty-six per cent of these degrees were taken at the age of twenty-nine or later, whereas

at the university only about six per cent were taken so late.¹ When the ages at which the degrees were taken are examined in connection with the class of institution that granted them, the following facts appear: Altho earning nearly half of the total number of bachelor's degrees on time, the normal school teachers have earned fifty-eight per cent of their low grade degrees and but thirty-nine per cent of their first class degrees at the age of twenty-five or before. That is, the poorer degrees come easily and at an early age, while the standard degrees come later.² Among the teachers at the university, altho eighty-nine per cent of the twenty-eight³ low grade degrees were earned on time, eighty-three per cent of the one hundred ten first class degrees were likewise obtained at the age of twenty-five or earlier.

It will, of course, be suggested that, in a normal school instructor who has spent a longer or shorter interval before or between his college years in teaching, belatedness is a virtue, whatever may be the case with college teachers. The theory is that the maturer student who has taught derives more benefit from his college work, particularly as a prospective teacher; his trial efforts have revealed the difficulties of teaching, have focused his attention and appreciation, and have sharpened his motive. There can be no doubt of this—to an extent. There is danger, however, lest maturity of grasp of mere college work be reckoned too much to the advantage of the individual, while the loss of momentum and point of view favorable to advanced study and gained by fairly early education is ignored. It seems hardly open to question that beyond a certain point delay serves simply as a brake; that possessing a college education at the age of twenty-four, a student normally makes more intelligent use of the years to thirty, and arrives there ahead of the belated college student graduating at that age. Much preliminary and unsupervised experience will prove to be a waste of time if not a positive injury. Such would undoubtedly be the attitude of medical men toward practical medical experience before theoretical medical training. There is a difference here only in degree. Professional training in education is rapidly achieving the power to make the tyro in teaching appear quite as much of a bungler as is the novice in medicine. In both professions a little unskilled experience is probably of use to the practitioner in raising and defining problems for future solution; but the time speedily comes when delay in obtaining further education is a loss. Such delay is prohibited in medicine for the sake of the patients and should be prevented in education for the same reason.

RETARDATION AND GRADUATE WORK

We are dealing here with prospective normal school instructors, all of whom must be expected to have done graduate work. The Missouri conference agreement now

¹ The schools themselves vary considerably in this particular. Cape Girardeau leads with 62 per cent of her teachers' bachelor's degrees taken on time; the other schools take the following order: Springfield, 52 per cent; Warrensburg, 48 per cent; Kirksville, 38 per cent; and Maryville, 36 per cent.

² Here, likewise, the schools show a marked difference, but are consistent in their relative tendency in every case except Maryville: teachers at Cape Girardeau earned 83 per cent low grade, but only 55 per cent first class degrees on time; at Warrensburg, 67 per cent and 35 per cent; at Springfield, 67 per cent and 36 per cent; at Kirksville, 50 per cent and 26 per cent; and at Maryville, the one exception in sequence, 29 per cent and 43 per cent.

³ Low class degrees were counted only when no first class bachelor's degree was held.

calls for the master's degree as the standard evidence of qualification to teach in a normal school, but that can be considered only as transitional; there is no reason why the preparation implied in the doctor's degree should not be required of normal school teachers as well as of college teachers, if they propose to do coördinate work, and if appropriate forms of such professional preparation are now available, as is the case. It is of interest, therefore, to discover what relation, if any, exists between belated graduation and post-graduate work. It may first be noted that the master's degrees taken by teachers in the normal schools are taken late: slightly more than half of those who hold such degrees and gave record of their ages took their degrees at the age of twenty-nine or later, while at the university but nineteen per cent had reached that age. If now we examine the ages at which those who went on for graduate work took their bachelor's degrees, we find that sixty-two per cent were twenty-five years of age or under, while of the group that did not go on, only thirty-nine per cent took their bachelor's degrees on time. This seems significant. It would fairly describe the tendency to say that in general the student who of necessity postpones his college course finds it exhausting, completes it out of breath, and has less ambition and energy for the advanced study which is to be his all-important professional equipment.

Judging from the available data, therefore, as well as from the analogy of other professions, the effectively trained teacher would be the naturally gifted man or woman who has secured his formal training early in a high grade institution and who, after a limited amount of successful experience under competent direction, has taken two or three years of graduate work. Such a man or woman is ready at the age of twenty-seven or twenty-eight, with a sound and comprehensive intellectual equipment, to begin a career as teacher, administrator, or expert in educational research. It is to this type of teacher, further tested by experience and achievement, that we must look to give instruction in the training institutions of this country.

EXPERIENCE

After formal training, the most important element in fitness to train teachers is likely to be the duration and character of preliminary experience. It is reasonable to assume that each type of professional training has a type of experience best suited to ensure its highest efficiency. In the preparation of teachers this would appear obvious enough: a person can scarcely hope to qualify as a guide for teachers of children in public schools without first-hand and continuous experience with the conditions and problems which he is fitting his students to face. As a counsel of perfection such a principle would appear to hold good throughout a training-school staff; in actual practice there are some positions, those for example in certain special subjects or even in highly specialized forms of subject-matter, where such experience may be dispensed with. It is unquestionably true, however, that any institution bent on closing the gap between its "professional" and "academic" work, and desirous of in-

fusing a single fixed and all-pervading purpose into its operations, will look first of all to its faculty. The thing cannot be done unless every teacher has himself had sufficient teaching experience of the particular kind in question to determine the pattern of every course he gives. There is no such thing as teaching in general, and teaching in particular is highly specific. We should expect two hundred well-trained normal school teachers to exhibit a large amount of preparatory experience.

The Missouri teachers have had experience; whether it is of the appropriate kind may not be so clear. In total years of teaching experience,¹ the normal school teachers and the teachers in the private colleges rank together; the median is twelve. The median at the state university is nine, and at the junior colleges, six.

KIND OF EXPERIENCE

Altho their total experience runs very high, the normal school teachers have a median tenure in their present institutions of but four years as compared with five at the state university and between six and seven at Washington University. Their experience has been of a somewhat different sort, as further analysis shows. Altho two-fifths have had less than five years experience in any higher institution, nine-tenths of them have had experience in elementary or secondary teaching. The meaning of this fact stands out clearly when comparison is made with the other great teacher-training body in the state—the university, where fifty-six per cent of all who instruct prospective teachers of boys and girls have had no experience in teaching outside of college or university. It becomes still more significant when compared with the English training colleges for teachers, where the instructors have had practically no experience in the schools for which they are preparing teachers, and where, as a result, the training colleges are completely out of touch with the lower schools. There can be no doubt that the principle of selection on the basis of experience which our American normal schools have applied in a general way to the choice of their teachers is a considerable virtue that should be conserved as the training of these teachers is strengthened in its theoretical aspects. Experience should be more definitely required and more closely scrutinized as to its quality. Slightly more than one-fourth of the teachers in Missouri normal schools lack elementary school experience; yet they are training chiefly elementary school teachers. One-fourth have been superintendents—a position that has usually included secondary and occasionally elementary instruction. Sixty-three per cent have taught in high school, while twenty-one per cent have had some experience in college or university instruction. Over one-half have taught in rural schools, altho in this qualification, as in others, there appears a sharp difference in favor of the men.

Such an array of preparatory field service would seem greatly to enrich the instruction until we discover that there is no well-ordered relation between the expe-

¹ See page 422.

rience and the present occupation: that former high school teachers of English and history are now showing students how to teach arithmetic and geography to sixth grade children; that courses in school administration are given by teachers who have had no adequate experience even in supervision; and that former principals and superintendents are now teaching Latin and sociology. In other words, the particular kind of experience, instead of furnishing an all-important background for the present purpose of instruction, is largely unrelated; teachers have in very many cases received their present appointments as promotion out of educational jobs of different sorts and not because of distinguished excellence in the kind of teaching for which they are now asked to prepare students. It is plain that the close contact between the normal school and the public school, fortunate as it is, is rather the chance of evolution than the conscious recognition of a sound principle. To secure the latter it should be required that in addition to a good general education and specific training in his field, every normal school instructor should have had likewise a reasonable amount of specific experience in doing the thing for which he undertakes to train others.¹ This would maintain a fine tradition in its most effective form.

TEACHING ASSIGNMENT

The natural correlative of training and experience is to be found in the teacher's present occupation and the conditions attending its pursuit. The latter include many phases of administration which will be dealt with in connection with that topic; the aspects having particular significance here are those involving the scope and weight of the assignment. An examination of the teaching programs of 1915-16 shows that eighteen per cent of all teachers in Missouri normal schools teach more than one subject. Forty-two instances occur among the teachers of the regular session and fourteen among those teaching only in the summer. They are about evenly distributed among the schools, and in all but ten instances involve so-called "college" work. Certain subjects, such as education and psychology, especially educational psychology, physics and general science, history and economics, have a natural affinity, and, even as college instruction, might conceivably be well handled by the same teachers. Other combinations are allowable enough in a high school, but are suspicious when offered for college credit. Spanish is combined with German, with history, and with photography; German is offered further by a teacher of Latin and a teacher of French. Physics teachers teach also mathematics and chemistry; history teachers teach Latin, mathematics, and geography. Teachers of education teach geography and chemistry, and a teacher of English teaches sociology. Nine teachers in the regular session have a combination of three subjects. As one might surmise, three of these teach education; one

¹ An admirable instance of the successful enforcement of a policy of selecting experience for a present purpose is shown in the staff of the St. Louis high schools. It is desired to have teachers with experience in elementary instruction, in order to ensure a true perspective in high school work. In 1915 over sixty per cent of the teachers in the Soldan High School were thus equipped, the remainder, with occasional exceptions, having only high school experience. If an incidental advantage can be secured to this extent in a high school, a normal school should hold out stubbornly for a requisite that is essential.

combines it with English and geography, and two with history and mathematics. Chemistry combines once with physics and mathematics, once with bacteriology and general science, and once with physics and physiology. One teacher gives instruction in French, German, and Spanish. To call such work "college" work is probably unjustifiable in most cases. It is impossible to expect a collegiate grade of work from an individual who must teach five classes per day in two or more distinct fields, and teachers who are properly trained will refuse to do it. In justice to the normal schools it must be said that such cases represent a past condition that is fast being outgrown, as is shown by the fact that eighty-two per cent of all their instructors are now working in single departments. The chief mistake has been in the assertion of claims for collegiate recognition during recent years when conditions were admittedly much worse than they are to-day.

LENGTH OF PROGRAM

Of even greater absolute importance than the diversity of assignment in determining the quality of work is the teacher's time schedule. The most striking feature of the teachers' quarterly programs in 1915-16 is the wide variation among the schools.¹ In summer nearly three-fifths of the teachers at Cape Girardeau gave from twelve to nineteen periods of instruction per week, while at Springfield only three per cent gave so little. Sixty-seven per cent at Springfield had twenty-five or more periods as compared with four per cent at Cape Girardeau, and six individuals at Springfield had thirty periods or more. How can work done under such dissimilar conditions be compared? Similarly at Warrensburg over half of the programs in the regular session called for from twenty-five to thirty-five periods weekly, while Kirksville asked but one teacher to exceed twenty-four periods and but three to exceed twenty. Yet no similar variation in salary occurred; in fact, the teachers at Cape Girardeau, while having much shorter programs, received on the average higher salaries than the teachers at Springfield. There could be no more forcible argument for the need of some regulating authority to establish for all the schools a common schedule according to some well-considered standard.

A second fact that stands out is the marked increase of load during the summer session. Twice as great a proportion of teachers were carrying from twenty-five to thirty-five periods in the summer term as did so during the regular session; the percentage of all summer term teachers carrying such programs was forty-two. If summer work involved simply a high tho possible maximum based on a reasonable and compensating minimum for the regular session, the case would be different. As it is, every such program is super-maximum. No normal school instructor professing to do collegiate work should be allowed to teach twenty-five class-periods per week at any time: the fact itself brands the quality of the work as necessarily inferior. When the inrush of summer students is permitted to create such schedules, there can be but one result:

¹ See page 425.

the work degenerates into a genial and superficial formalism of little value; the school gyrates thru the summer on the momentum of the good work done in the regular session, and is obliged to recover its balance in the fall. The extraordinary industry of the summer attendants helps to overcome the evil, but the effect on the faculty is exhausting. This judgment is fully corroborated by impressions received during visits at the schools, especially at Springfield. The teachers dread the summer term and discredit the work done under such conditions. When the same situation prevails throughout the year, comment is of course needless.

WHAT IS A REASONABLE LOAD?

There is certainly no single or arbitrary rule by which a reasonable standard of amount of work for normal school instructors may be determined. It would seem to be closely involved with two main factors: the capacity of the instructors and the quality of work desired. No one would propose to turn a high school staff into a college faculty by reducing the weekly load from twenty-five periods to twelve. The average high school teacher would scarcely know what to do with the time; he has a generalized training with or without special emphasis in one or two fields; he has a distinctly routine attitude toward instruction, and to him the physical burden of twenty-five periods is not excessive. In some high schools, where specialized graduate work is now required of teachers, instruction tends to assume a fresher, more intense, and vital form; here, therefore, appears also the tendency to shorten hours to fit the better type of teacher, not because he can compel it, but because he has the ability and training to make his four hours a day worth another's five. Similarly the good college instructor is expected, thru complete familiarity with his subject, to give his material an original and vigorous treatment. This he cannot usually do save in a single field or portion thereof, and he must live with his sources in their best forms to the point of saturation. To such an instructor more than three periods of instruction per day is a drain which his study time fails properly to replenish. He must keep abreast of the development of his subject, must continually revise his courses, and must himself do constructive study. For the sake of his product it is usually well worth while to give him time for all of this.

Assuming a faculty trained to high grade work, the question of schedule becomes a question of the quality of work desired. There is an impression that a heavy schedule is merely a burden to the teacher; that he continues somehow to produce in larger amount the best of which he is capable. This is of course a mistake. A school demanding that a teacher give twenty-five periods of collegiate instruction per week simply gets that teacher's energy and effort spread out thinly over twenty-five periods instead of concentrated into fifteen, and each class suffers accordingly. It is difficult to make the average school board or layman understand this; to them an instructor teaching thirty periods is obviously twice as valuable as the one teaching half that time. To any one who knows what college work is, however, it is apparent that the

institution that professes to do college work on such a basis is seriously deceiving both itself and others.

In view of these two considerations, the situation in Missouri normal schools suggests certain comments. When studied for the purpose of evaluating claims to collegiate recognition, the schools would appear to have failed to realize the terms on which such recognition could justly be based. The levels of work to which each instructor is assigned are so varied that nearly all cases of excessive program involve some college work and several are exclusively collegiate.¹ The length of period in the normal schools is the same approximately as at the university.² There is no apparent reason why the same standards should not be applied. As evidence that they can be successfully applied, the example of Harris Teachers College at St. Louis may be cited. Here, in an institution offering two years only of collegiate work, no teacher's schedule calls for more than fifteen hours, and the average is considerably lower.

It is probable, however, that a standard college schedule should not be applied abruptly to the normal schools, except for such teachers as are already trained college workers. There is on the faculty of each school a considerable number of teachers of the high school type; men and women lacking special training and bred by long use to the old style normal school program.³ Some of these are good teachers who might yet acquire adequate preparation, or who would at least be acceptable instructors in secondary subjects. On the other hand, in so far as the schools attempt college work, the present little group of well-prepared teachers should at once be enlarged and placed on a strictly collegiate basis in respect to hours and subjects. A training school for teachers, of all institutions, ought to make its own standards in these respects unimpeachable.⁴

GOOD TEACHING AS EXACTING AS RESEARCH

There is a feeling on the part of some that the function of a training-school staff should not involve research, but should consist exclusively in inculcating known truth, and that consequently a fuller teaching program is permissible. The premise

¹ Out of one hundred twenty-eight programs in academic and professional subjects, eighty-six, or sixty-seven per cent, show ten or more periods each of college work; nineteen programs are wholly collegiate, and only sixteen are wholly secondary. It is urged at Springfield that secondary normal school work should count on a twenty-five period basis as ordinary high school work. But Springfield also avers that its two terms of geometry and of history are worth three in the high school because of its "college" teachers and mature students!

² When these statistics were gathered, the normal schools were operating in general on a fifty-minute period; Kirksville lengthened some periods to fifty-five minutes, and Springfield and Maryville reduced some to forty-five minutes. Such differences are of little importance in defence of the conditions described. When once adjusted to a student-group and prepared to meet it, a teacher welcomes a longer hour; it is the number of such readjustments that counts. The longer interval between classes at the university as compared with exchange of classes within a single building tends to equalize the periods still further.

³ It was interesting, and often amusing, to observe in personal interviews with teachers how naïvely this point of view was betrayed. Not a few who were teaching "college" classes twenty or twenty-five periods per week — a program that would rightfully stagger a mind that understood what it meant — spoke glibly of their enjoyment of it. It appeared to challenge their idea of a good day's work to stand before a class for as many hours as once they had kept a country school. It is needless to say that their instruction was of the corresponding type.

⁴ Since the data on which this study was based were secured, an agreement between the state university and the normal schools stipulates a maximum teaching program of eighteen hours weekly. To what extent this provision has been enforced and the nature of its effects have not been ascertained. It is an obviously proper arrangement.

back of this attitude is partially true, but the conclusion is wholly mistaken. Technical research in education requiring minute and prolonged experimentation is doubtless out of place in a training school under present conditions, altho this may be said only with the proviso that these schools be kept in intimate touch with such work even to the extent of limited participation. It is not too much to expect that some one serious undertaking of a research nature should be under way at every normal school all of the time. But the heart of the job in an institution for preparing teachers is unquestionably the teaching itself. The foremost feature of a successful school of this type, the lever on which it must chiefly depend to accomplish its results, is the ability of each and every instructor to present continuously the performance of the finished artist in teaching as teaching. It is contact of this sort that soonest and most deeply fastens fine ideals of teaching in the minds of young students. This ability in a teacher is not the ability required to prepare books or to conduct general investigations. It presupposes rather a constant and sympathetic intimacy with the kind of instruction for which the teacher is preparing others; it develops a more and more sensitive insight into the needs of students and the ways of winning access to them; and, finally, it commands an inexhaustible fund of human interest and personal force that by common consent justifies the name "teacher" in the greater sense. All of this means devoted thought and a lavish expenditure of power. To teach teachers is of necessity a work lightly undertaken by many, since a multitude must undertake it; but to teach teachers well is the most exacting and responsible as it is perhaps the most inspiring business in the academic world. While, therefore, much more must be demanded of the normal school instructor than he usually gives to-day, he should in turn be protected, even more than his colleague in the university, from requirements that check his growth and stifle his best expression.

PRODUCTIVE SCHOLARSHIP

For the reasons just indicated one may hardly expect to find in a group of normal school teachers that productiveness for publication which is properly characteristic of teachers in a good college or university. Fifteen bound volumes by thirteen authors represented in 1916 the formal output of these two hundred teachers thru a score of years. The largest number at any one school is six at Warrensburg. Two-thirds of these were modest textbooks of various kinds, the remainder were doctor's theses or dealt with local history. About twenty teachers have contributed occasional scientific articles to the better technical periodicals of their departments. Perhaps thirty have written more or less for local school publications of merit, especially at Kirksville and Cape Girardeau, and still others contribute now and then to local newspapers and magazines. Except for two or three, it did not appear from the reports submitted¹ that any teachers could be termed systematically productive in a professional sense, aside from their teaching.

¹ Individual reports could not be secured from Warrensburg.

Altho the limitations of his occupation may excuse a normal school teacher from general research of the usual academic type, such exemption can scarcely apply to his strictly professional obligations. The worker of this class is supposedly a laboratory student in the psychology of public school pupils, and in the changing organization of materials for their ultimate use; he is a critical investigator of the developing social needs of his community, and of the failures and successes of his students in service. He is confronted with a vast number of difficult and unsolved problems with which he must of necessity deal in one way or another; if he is truly professional, he will deal with them as scientifically as he can under the circumstances, and with a progressively experimental purpose. Out of this experience should spring a lively and invaluable professional literature registering the progress of the teacher's own work for the benefit of similar workers everywhere.

The lack of such a literature and, to a great extent, the lack of the attitude that would produce it, is readily traceable to causes already discussed. The deadening load under which these teachers are forced to work makes it impossible. Four or five meetings with classes each day not only leaves one no time for any but conventional procedure, but it sooner or later paralyzes a teacher's power to originate and carry thru anything else. When to these are added correspondence courses, extension appointments, faculty committee work, and social obligations with students, a normal school instructor is reduced to the status of a teacher in the usual secondary boarding school. All of these duties should undoubtedly be performed, but by other people whose chief business these duties might be.

Because of such conditions, and a frequent lack of sufficiently specialized training, the professional consciousness of the group, so far as its concern with the productive scholarship of its craft goes, is low. With certain exceptions its members who seek public recognition do so thru work that takes them out of normal schools instead of committing them more completely to the interests of these schools. The educational and literary world is filled with men and women who served what they consider a hard apprenticeship in normal school work, and date their real intellectual début from the time they left it. This persistent withdrawal and transfer of productive minds to other fields, this apparent failure of the work itself to engage and hold the devotion of many fine students who have undertaken it, has contributed not a little to bring normal school instruction into a certain disesteem. "Academic" work elsewhere, even at an equal or lower salary, is very generally preferred. All of this is due to mistaken ideals and ought to be changed. The people who prepare public teachers are potentially among the most important servants of the state. The solidarity of purpose among persons so commissioned should be profound, and their practices should be the result of unlimited professional interaction. More rational conditions of preparation, service, and reward among these teachers will undoubtedly be marked by a productive scholarship that will be both an immense assistance to the profession as a whole and a reassuring evidence of the high quality of its membership.

ECONOMIC STATUS — FAMILY AND DEPENDENTS

Before discussing the salaries of the normal school teachers it is important to understand certain other items that bear more or less directly on their economic situation. Nearly nine-tenths of the male instructors in the normal schools are married; of those past forty years of age, all but one are married. Of the women, about eight per cent are married, all of these teaching at Springfield and Cape Girardeau.

The median representative of the married teachers has two children; only three per cent have from five to eight children, while nearly half have only one or none. A fair comparison may be made between the parent families of all the married teachers over forty years of age and the families that such teachers themselves have reared. The median number of children in the present generation is two, and but thirteen per cent of the families have four or more. The representative family of the preceding generation in this group had six children; eighty-one per cent had four or more, and thirty-six per cent had eight or more children. The change in family life is noticeable even between the older and the younger teachers. The median parent-family among all those over forty has six children and one-fourth of the families have more than eight; as compared with a median of five with but nine per cent having over eight in the younger group. The women come from smaller families than the men in both age groups, as they are more frequently from professional or commercial families in towns and cities.

The number of dependents measures the economic burden with greater accuracy than the number of children. Here again the men are distinguished sharply from the women. Only one-eighth of the men have no dependents, while of the women more than half have only themselves to care for. Nearly half of the men have more than two dependents, while slightly over one-tenth of the women have as many. One-fourth of the men have more dependents than any of the women except two.¹

LENGTH OF TENURE

The length of tenure in normal school positions is not unlike that in the university. About sixty per cent of the teachers in both university and normal schools have been in the institution from one to five years. Twenty per cent at the normal schools and twenty-seven per cent at the university have served there nine years or longer. One man in each group has served over thirty years. Among the five normal schools, Maryville and Cape Girardeau exhibit the greatest contrast. Maryville has nearly twice as large a proportion of one or two year teachers as has Cape Girardeau. Cape Girardeau in fact shows a stability of faculty personnel exceeding even that of the university, tho the significance of this can of course be judged only in connection with training, experience, salaries, and proved teaching ability.

¹ The differences between the schools are sometimes marked, tho probably without significance. At Maryville a third of the men and half the women are unencumbered, while at Springfield three-fifths of the women but none of the men are without dependents.

SALARIES—VARIATION AMONG THE SCHOOLS

The salary variations among the five schools are large, revealing again the lack of any stable principle guiding the regulation of wholly identical work for identical purposes.¹ Teachers at Warrensburg are better off by two hundred fifty dollars than at Kirksville. The median salary of women teachers at Springfield is one hundred forty dollars less than at Warrensburg, while the median figure at Springfield for both men and women is three hundred fifty dollars below the median at Warrensburg. Springfield, however, pays three-fifths of its men over eighteen hundred dollars as compared with one-quarter so paid at Kirksville and one-eighth at Maryville. Kirksville gives only half of its women teachers more than twelve hundred dollars, tho at Warrensburg eighty-four per cent receive from twelve to eighteen hundred. Such marked differences have no justification and indicate weakness in the general administration.

COMPARISON WITH THE UNIVERSITY

The difference between the median salary at the normal schools and that paid at the university is \$550.² For the amount of work done as shown in weeks of service and hours of instruction the normal school salaries, if rated by college standards, are absurdly low. Considering their shorter year's work, the high school teachers of large cities are much better paid³ than these officers of the state engaged in what the state recognizes as collegiate instruction for one of its most important professional groups. One of the dozen highest paid men in the normal schools receives \$2400 for a year's work. The corresponding teacher at a standard college receives \$2500 to \$3000, and teaches three-fourths as many weeks in the year and three-fifths as many hours in the week. Correcting a moderate college salary, say \$2500, for these two extra loads, we find that the college instructor would draw about \$5500 if at his present rate of reward he performed the time equivalent of what the normal school man now does for \$2400. The college instructor does not receive this higher recognition for nothing. He supplies in knowledge, training, and grasp of his subject a commodity that is worth already more than he gets for it, and if it be proposed to demand an equivalent from normal school instructors, the indispensable outward indication that such equivalence has been established is the approximate equality of reward.

THE BEST PAID GROUPS

Normal school salaries show no correlation with rank, as at the university, since the normal schools have no such groupings of instructors. Age has some influence.

¹ See page 428.

² In arriving at this result the salaries at the university have been raised by the proportion of salary regularly paid by the university for summer session instruction to compensate for the additional term of work required at the normal schools and included in the normal school teacher's salary. See page 423, note 2.

³ Median salary of St. Louis high school teachers, \$1640. Correcting this for six weeks additional instruction required of normal school teachers would give about \$1875. The hours of weekly program of the two institutions are not far apart—twenty-two to twenty-five.

All those receiving over \$2000 are thirty years of age or over. No one over thirty receives less than \$1080. Those receiving \$1600 and above number eight per cent of the teachers in their twenties, forty-seven per cent of those in their thirties, fifty-six per cent of those in their forties, and all of the remainder. The teachers of the group receiving more than \$2000 number twenty-four, all men, and exhibit certain characteristics that throw light on conditions of promotion. Only five are over fifty years of age. As a group they have had nineteen years of total experience, and have held their present positions for eight years. They teach about twenty hours per week, twelve of them teaching science or mathematics, six education, and six history, languages, or music. Aside from the five who teach mathematics, four only, one each in music, history, geography, and English, are specialists in subjects taught in the elementary schools; seven are deans or directors of training schools. Two-thirds of the number have their present work clearly correlated with their training and experience, eleven having graduate degrees, in most cases from first class institutions; four show excellent training without specific experience, and three have had appropriate experience but lack training. In three-fourths of the cases the visitors' estimates of their ability were favorable.

The sixteen highest paid women receive between \$1500 and \$2000. Two are under thirty years of age; three are fifty or over. Five have no four-year degrees; of the remainder, eight hold the degrees of good institutions; four have done graduate work, one holding a Ph.D. from the University of Pennsylvania. As a group they have a median total experience of twelve years, seven of which were in the present position. They teach about twenty-two hours weekly in the following subjects: history (1), mathematics (2), English (3), art (3), home economics (3), foreign languages (1), and supervision (3). Here, as with the men, the special subjects of instruction in elementary schools are meagrely represented. Nine of the sixteen teachers show a definite correlation of training and experience with their present work; five lack suitable experience in elementary schools, and two lack specific training. Four were not visited, but only one of the remaining twelve impressed the enquirers as being an unsuccessful teacher.

On the whole, the high salaries for both men and women in the normal schools appear to represent a genuine selection with emphasis on good training, helpful experience, and genuine ability rather than on age or tenure, tho instances occur of each of the latter. There is an obvious tendency, however, to favor teachers of academic and college subjects or special subjects such as music, art, or home economics, to the disadvantage of subjects bearing directly on the needs of elementary school teachers.¹ This appears to mean either that marked skill in the fundamental function of a normal school teacher, that is, the giving of specific instruction in how to teach, has a relatively diminished chance of financial recognition, or else that superior ability of that kind is not present.

¹ Of the seven well-paid teachers of mathematics five teach arithmetic, one class each.

INSURANCE

There is no retiring allowance system affecting normal school teachers in Missouri; their provision for the future must therefore depend upon their private savings either directly or in some form of insurance. Nearly twice as large a proportion of men are insured as of women, the proportion of men varying from seventy-two per cent at Springfield to ninety per cent at Cape Girardeau, and of women from twenty-eight per cent at Kirksville to fifty-five per cent at Warrensburg. Three-fifths of the insured women hold endowment policies only, and one-fourth more hold both endowment and other forms. Less than one-fourth of the insured men carry endowment policies only, tho two-fifths carry both forms. Of the forty-one women reporting insurance nearly one-half report the amount as \$1000. One-fourth carry from \$1000 to \$2000, and none holds over \$4300. One-third of the men, on the other hand, have from \$2500 to \$5000 in insurance, only six per cent holding less than \$1500, and the highest group—thirteen per cent—carrying from \$8250 to \$11,000. Two individuals carry \$15,000 and \$17,000. Of the teachers with dependents four-fifths are insured as compared with two-fifths of those without dependents, and in general the amount increases with the number of dependents.

TEACHERS AT HARRIS TEACHERS COLLEGE

The twelve teachers reporting in 1915 from Harris Teachers College at St. Louis are older than those in the state normal schools; the median age of the five men was forty-three, and of the seven women fifty years. Nine were Americans, one was of English, one of Irish, and one of German parentage. Four were children of farmers, and grew up in families averaging six children each. Two were born in Missouri, and one gave no record; the remaining nine represent nine different states east of the Mississippi from Tennessee north. One woman and all of the men were married; three had children.

Four teachers of art, physical training, and penmanship had special education for those subjects. The rest held bachelor's degrees, all but two from first class colleges, and these two later took graduate degrees. Two held the doctor's degree, and one other the master's degree; all from first class institutions. Eight had been partially trained in normal schools. Teaching experience ranged from twelve to thirty-four years with twenty-one as the median; the median tenure of position at the present institution was nine years. All but one had experience in elementary teaching, while three only lacked secondary school experience. In normal school work the experience ranged from three to eighteen years, and two had taught in colleges.

The salaries are higher than at the state schools, and the men receive over one-third more than the women. The median salary for men is \$2850, and for women \$1880; the average salary is about \$150 greater in each case.

Compared with the teachers in the state schools, it may be said that the teachers at the Harris Teachers College are, as a group, more mature, have better training,

more, and more appropriate, experience, and are better paid. Furthermore, instead of twenty or twenty-five periods, their programs average about ten class-periods per week with a maximum of fifteen. There are in addition certain obligations in the extension department, but the total average load never exceeds fifteen hours.

B. STUDENTS¹

AGE AND SEX — NATIONALITY AND NATIVITY

The five state normal schools of Missouri enroll annually between seven and eight thousand students. Twenty-eight per cent are men, and slightly over half are secondary students, altho both of these proportions are diminishing with some rapidity.² The ages of the group range from twelve to over fifty years; about three hundred are sixteen or less, and a few more than this are over thirty; but the middle fifty per cent ranges from eighteen to twenty-two inclusive. The median age for all students is twenty years; in the group attending only in summer, it is twenty-two; twenty and twenty-two are likewise the median ages in the secondary and collegiate groups.³

Slightly over half of the students report the nationality⁴ of their parents to be American. Maryville with two-thirds, and Cape Girardeau with one-third, represent the extreme proportions. English and German are the predominant foreign elements, and occur in nearly equal numbers.⁵ Natives of Missouri constitute nearly seven-eighths of the students. The collegiate students are nearly three-fifths town bred, while but half as many of the secondary students are from town.

PARENTAL OCCUPATION AND INCOME—SIZE OF FAMILY

A study of the parental occupations emphasizes the dominant rural background. Parents engaged in agriculture furnish sixty-five per cent of all the students, altho agriculture engages but thirty-five per cent of the industrial population of the state.⁶ Seventy-seven per cent of the secondary students come from such homes, while but sixty-two per cent of the collegiate men and forty-eight per cent of the collegiate women were children of farmers. On the other hand, twelve per cent of the collegiate students are children of professional men, a class who make up less than five per cent of the population.

It is usually difficult even for the farmer himself to form an exact estimate of his annual income. It was not surprising, therefore, to secure such estimates only from about half of the students who replied. Just half of these report \$1000 or less, while thirty per cent were from families receiving over \$1500. But of the college women taken alone, forty-five per cent had family incomes of more than \$1500, while only

¹ For a description of the data from which the conclusions in this section are derived, see pages 402-404.

² See pages 428, 429. ³ See page 429.

⁴ It is quite possible that some students confused this term with *ancestry*. The school authorities at Cape Girardeau believe this certainly to be the case there.

⁵ See page 429. ⁶ See page 430.

twenty-eight per cent of the college men were so well off.¹ This modest financial status of the student's family reappears in the extent to which self-help is undertaken. Half of the men and nearly a third of the women were wholly self-supporting, and a few others—seven per cent—supported themselves in part. Of the collegiate group about two-thirds of the men were self-supporting.²

As in the case of normal school teachers, the students are from large families. The median size is six with sixteen per cent from families of nine or more children,³ while the median student in the school of education at the university is from a four-child family, and but eight per cent come from families of nine or more children.

CHOICE OF VOCATION—OTHER TEACHERS IN FAMILY

The student's selection of teaching as an occupation appears to have been largely due to the fact that some other member of the family had taught. This possibility appears at least in the cases of over three-fifths of the students; one-seventh of them all belong to families having three or more other teachers.⁴ The proportion from families other members of which at some time attended a normal school is still greater—sixty-five per cent;⁵ and in nearly all cases these had attended the particular normal school concerned. In two of the schools, Cape Girardeau and Springfield, the students were asked what person or circumstance first interested them in teaching. Half of them referred the suggestion to their families, and a fifth were inspired by "teachers;" three per cent suggested their desire for self-support.

FINANCIAL ATTRACTION

That the prospect of financial return enters largely into the reckoning appears significantly from the replies to another question. "Is teaching the best-paid employment you could undertake?" was answered by seven-eighths of the attendance at all the schools. Seven-eighths of the women thought teaching their most promising opportunity, while fewer than half of the men were of that opinion; the proportion of secondary students is a little higher in each case than in the college group.⁶ Taken in connection with the large majority of men not intending to teach permanently⁷ this result was, of course, to be expected. Even the forty-eight per cent who favored teaching very likely considered it more profitable as an immediate and temporary occupation only. In preference to teaching, agriculture received nearly half of the men's votes and clerical occupations nearly half of the women's; professional services of various kinds and trade are the next choices.

DISTANCE FROM SCHOOL

The effect of the school itself in determining the choices of students is difficult to measure. Like most other educational institutions, its influence saturates its imme-

¹ See page 431.

² See page 431.

³ See page 431.

⁴ See page 432.

⁵ See page 432.

⁶ See page 431.

⁷ See page 434.

diate vicinity, and weakens rapidly with increasing distance. Accessibility, too, plays an important rôle. The local county supplies about one-fourth of all the students in the normal schools, including eighteen per cent who come from the local town. Six or seven contiguous counties furnish another fourth; the remaining twelve or fifteen counties in the district contribute a third, while one-seventh come from other portions of the state. Three per cent come from outside the state. The schools have steadily claimed that much of their local attendance consists of students who have changed their residence for the sake of school privileges. This seems technically to be the case, but the inference as to its significance may hardly be justified; many have indeed moved into town for the sake of the school privileges, but probably not more than one-fifth of all these local students come from beyond the next county.¹

PREVIOUS EDUCATION

The previous education of normal school students depends upon the occupation of their parents. More than two-fifths had their elementary education in the rural schools only. The remainder in about equal numbers attended graded schools or had a combination of graded and rural school training. When questioned as to the amount of elementary school attendance, they show a median of sixty-one months, or between seven and eight years of eight months each. The reports of one-third fall within this eighth year, a third had more, and nearly a third had less. Over half report having had from five to eight elementary teachers; nearly one-third had from nine to twelve, and but one-tenth had more.²

The high school education of secondary normal school students will be shown in considering the administrative problem of the secondary student.³ In the case of the collegiate students, the most conservative figures would indicate that in 1913-14 two out of three men and somewhat more than four out of five women had at some time attended high school.⁴ Two-fifths and three-fifths, respectively, had attended a first class high school. Completion of secondary work in high school is, of course, another matter. The imperfect records available show that in 1913-14 twenty-eight per cent of the collegiate men and fifty-three per cent of the collegiate women had done their secondary work before coming to the normal school.⁵ Approximately the same proportions hold in the case of graduates, and are often much higher especially among two-year graduates.⁶

¹ Data represent resident students at Kirksville, Warrensburg, and Maryville. Of those reporting local residence (440), one-half say their parents moved thither for the sake of school privileges. But of these one-fourth moved in from the same county, more than one-third from contiguous counties, and two-fifths only, or one-fifth of the entire local group, from the remainder of the district or elsewhere.

² Data used in this paragraph were secured from Kirksville, Warrensburg, and Maryville only. An occasional student coming from the practice schools confesses to having had up to one hundred and twenty-five elementary teachers!

³ See page 296.

⁴ See page 432.

⁵ Reports from 1556 elementary teachers show similar results. See page 439.

⁶ In the eight years from 1907 to 1914, fifty-six per cent of the two-year graduates at Springfield took their secondary school preparation elsewhere, largely at the Springfield high school and Drury College, these two institutions together sending forty-two per cent of those prepared outside the normal school. At Kirksville forty-seven per cent

The figures given above were gathered at the beginning of this study for a still earlier period and are certainly conservative, owing to the defective records of many who were probably high school students. The replies of the students attending when the schools were visited in 1915 may show the conditions more truly. To the direct question: "Are you a graduate of a four-year high school?" four-fifths of the collegiate women and three-fifths of the collegiate men reporting at Kirksville, Warrensburg, and Maryville said "Yes." Students in all five schools replied as to the accessibility of a three or four year high school. Seven-eighths of the collegiate women had had such schools accessible, and seventy-one per cent had completed the course; two-thirds of the collegiate men lived near such high schools, and nearly half completed courses there.

If the conditions indicated here are typical, they are evidence of the existence within the normal schools of two relatively distinct institutions, one recruited mainly from high school graduates who come in for the higher work, and the other a shifting collection of secondary students who in general do not continue their education at the institution. Such disparate groups need different treatment. As set forth elsewhere,¹ the normal school should probably be relieved of the secondary student altogether. On the other hand, there plainly exists a collegiate student body of sufficiently homogeneous characteristics and preparation to make possible the organization of professional education on a satisfactory basis.

Two further items in the data on high school attendance may be of interest. One is the fact that the collegiate men represent high school training to a much smaller extent than the women. In the enrolment of 1913-14, slightly over half as large a proportion of men as of women attended a first class high school for four years,² tho this varies at different schools.³ In turn, twice as large a proportion of men as of women were educated solely at the normal school. From the point of view of the ultimate purpose of the normal school this is an unprofitable situation: a group of people who have but a transitory connection with the profession in the state is receiving an excessive share of the school's attention.

The other point to be noted is that the group of students attending only in the

of all graduates, 1909-15, were prepared in high schools; in 1914 and 1915 alone, fifty-two per cent. At Cape Girardeau, fifty-five per cent of the sixty-hour class of 1914, and in 1917 sixty per cent of all graduates were high school graduates also. At Warrensburg, the sixty-hour class of 1915 showed seventy-seven per cent who were prepared wholly outside and ten per cent in addition who had over three years of high school work.

It is noteworthy that in general high school graduates do not remain at normal schools for the four-year degrees. At Kirksville, where most of these degrees have been granted, but one-quarter of them were conferred upon high school graduates from 1909 to 1915, as compared with one-half of the one and two year certificates which went to high school graduates. At Cape Girardeau, 1917, one-third of the four-year degrees went to high school graduates, as compared with three-fifths of the shorter course certificates. The figures here given are for groups casually selected as more or less complete information was accessible.

¹ See page 295. ² See page 432.

³ Warrensburg and Maryville show twice the proportion of the other three schools. At Springfield and Cape Girardeau this might be expected, owing to the backward character of large areas within these two districts. The Kirksville district, however, led all others in the number of first class high schools in 1915, having fifty-three, as compared with thirty-seven and forty-four in the Warrensburg and Maryville districts. Yet the proportion of men at Kirksville in 1915 who graduated from high schools is only about half that in the other two schools. The situation is difficult to explain unless by reference to Kirksville's peculiar policies for attracting and retaining in her collegiate department men students whose secondary work is incomplete.

summer represents consistently more of the high school product than does the attendance at the regular session. The collegiate summer students have an advantage of nine per cent in the number of those having had four years in a first class high school. This seems to indicate that the high school graduate is more likely to go directly into teaching, attending the normal school later as required in order to maintain certificates or professional status. Such a tendency coincides with the reports from high schools quoted below.

QUALITY OF THE NORMAL SCHOOL STUDENT

Certain other facts may be presented in this connection that throw light on the normal school student from an outside source. The principals of fifty-eight first class high schools, outside of St. Louis and Kansas City, were asked to rate in three grades the members of one of their recent graduating classes, first, as to their standing in studies, and again as to the quality of their personality,¹ indicating in each case the occupation of the student during the following year. The replies show, for these schools and classes, the proportions in which the students in three quality groups are distributed among various types of occupation or institution.² The ratings concern a total of nearly nine hundred graduates.

The most striking revelation is the exceedingly small proportion of high school graduates who go at once to normal schools — six per cent. The reason, to be sure, is not far to seek: over one-third of the girls and nearly one-tenth of the boys from these high schools go directly into teaching. For this work most of them have the preparation afforded by the high school training classes.³

The qualitative features of the ratings are suggestive. The college group, which takes forty-seven per cent of the men graduates, includes sixty-five per cent of the men whose personality rating is "A" as compared with forty-seven per cent of the men who are "A" in their studies. The same relation obtains among the women, altho to a less degree. The graduates in the normal school and teaching groups, on the other hand, are stronger in their studies than in their personal qualities. Over half of the women who rank "A" in studies go to the normal school or into teaching as compared with less than one-quarter who attend college.

Analysis of the distribution according to quality within each institution or occupation⁴ indicates the same result. Of the college men less than one-third received "A" in studies, but in *morale* they are superior, having more "A's" than "B's" in

¹ The enquiry to the principals ran in part as follows: "You are requested to list below the members of the graduating class, indicating in each case (1) a percentage rating which shall approximately express the standing of the individual in his studies; (2) a letter rating in three grades, from A down to C, which shall express your estimate of the general efficiency of the individual as to character, initiative, and personal effectiveness; (3) the occupation of the individual during the succeeding year."

² See page 432.

³ Of the fifty-eight schools reporting, twenty-four had training classes that year, and the graduates of these training classes numbered altogether two hundred one, practically all of whom taught the next year. This is almost the total number who went directly into teaching — two hundred twenty. How many of them finally go to the normal schools either for summer terms or as regular attendants is uncertain.

⁴ See page 433.

personality. The men graduates of high schools who are in normal school or are teaching, on the contrary, show high ability in studies, but relatively low ratings for personality; thus, while forty-four per cent of the normal school men received "A" in studies, only eleven per cent received "A" in personality, as compared with sixty-seven per cent who received "B." The women show a contrast of the same sort, which is more significant because their numbers are larger. More than half of the college women are rated "A" in personality as compared with thirty-six per cent rated "B," while at the normal schools and in teaching the ratio is nearly reversed.

If the collective judgment of these high school principals is correct, it shows that among graduates from high school both the immediate work of teaching and the normal schools themselves are attracting good and industrious minds but second-rate personalities, while the college draws the strongest, most virile, and ambitious characters, tho not necessarily those who are the best in studies. This would corroborate, to an extent, the popular judgment in the matter. It is a situation that can hardly be changed until a standard preparation is required for teaching, and the normal schools, instead of loosely knit catchalls with vague functions, become intensively organized, self-critical, and selective institutions. Such a consummation waits directly upon a social policy that will subsidize far more heavily than to-day both the process and the product of such schools.¹

COMPARISON OF SECONDARY TRAINING IN HIGH SCHOOL AND IN NORMAL SCHOOL

The object of a second minor excursus, undertaken in connection with the consideration of high school preparation for the normal school, was to discover the quality of work done in the normal school by high school graduates, as compared with the work done by students whose secondary training was secured in the normal schools themselves. With this in view, graduates of each school, except Maryville, who had completed there eight or more units of secondary work,² were compared, as to the ratings earned on their subsequent college work, with graduates who had taken more than fifteen units in high school. That is, the marks given in each school to the group of graduates prepared wholly outside were compared with those given to graduates who had from half (presumably the latter half) to all of their preparation in the school. The ratings of about four hundred students were examined.³

The results of this comparison are negative rather than otherwise. Kirksville rates the high school graduates in these classes slightly higher than the students to whom she has herself given secondary training; in the sixty-hour group the difference is marked. The other three schools, however, give a few more high ratings to those who

¹ The figures used here are for graduates of first class high schools only. Returns from one hundred twenty-two second and third class and unclassified schools are less reliable, but show the same tendencies, especially in the lower ratings of those who leave high school to teach as compared with those who continue.

² It was necessary to include some who had had a part of their secondary training outside of the normal school in order to make the two groups comparable in size.

³ See page 433.

have taken their secondary work locally. On the whole, it does not appear that high school graduates fare conspicuously better or worse than those who take secondary work in the normal school.

ATTENDANCE AT COLLEGES AND OTHER NORMAL SCHOOLS

The normal schools do not appear to draw extensively from colleges, or to exchange many students among themselves. From the collegiate attendance at these schools during the regular session of 1915 nine per cent had attended colleges, two-thirds of them for a year or less. Three-fourths of these were women, and about a third of the total had been at the state university. Of the whole attendance for the same time and schools, but three per cent had been at other normal schools, and three-fourths of these were at other schools in Missouri.

TEACHING EXPERIENCE

The most distinguishing characteristic of the student body in many western normal schools, as compared with that of other higher institutions, is the fact that, for the most part, its members are drawn intermittently from active pursuit of the practice for which the schools are expected to prepare them. In Missouri this situation is due chiefly to the mistaken policy of the state in allowing its teacher supply to be regulated largely by local economic considerations instead of buttressing the schools with reasonable legislation; but the schools themselves are partly responsible. Altho the results of this practice are unquestionably bad for the service in that the lower positions are systematically exploited for the sake of the higher, the advantage to the individual student is marked. It gives him the opportunity of earning the money to pay his way, and the effect of these inter-layers of experience upon his education is doubtless stimulating to a limited extent, assuming that he is preparing to teach permanently; where the student is simply alternating study and teaching with some alien purpose in view, the procedure has nothing whatever to commend it.

Of the total annual enrolment in the normal schools, half of the men and three-fifths of the women had already taught.¹ Of the collegiate group, two-thirds were teachers, while of the secondary students, two-fifths of the men and over half of the women had had teaching experience. It is encouraging, however, to note that during the regular session the conditions are better. Leaving out the summer session, only two-fifths of the students have had teaching experience, and the proportion is greatest, naturally, in the collegiate group, where it is nearly one-half; among the secondary students the proportion dwindles to less than one-third. For three of the schools² it was possible to discover the nature of this experience. Rural school teaching predominates, as one would expect; about one-seventh of those in the collegiate group who have taught, lacked rural experience, and practically all teachers among the secondary group have been rural teachers, tho a quarter of them have had some grade work

¹ See page 438.

² Kirksville, Warrensburg, and Maryville.

also. One-fourth of the college students have done both rural and grade work, and about one-tenth have done some high school work. The collegiate women had been teachers only; but about two per cent of the collegiate men had been superintendents and three per cent had been principals. In length of experience, the summer session group shows a median of twenty-one months as compared with sixteen months among regular session students who have taught.

These facts reveal the presence during the regular session of a majority of students who are making their education continuous; and show that an evolution from the earlier conditions is in progress, tho still far from complete. There would accordingly appear to be good reason why the schools should establish thoroughly organized curricula for students who are expected to remain and complete the course consecutively, and for those only,—a suggestion more fully elaborated elsewhere.¹ Provision of another sort would be made for those experienced teachers who attend chiefly in the summer.

IMMEDIATE INTENTIONS OF STUDENTS

The intention with which students come to the normal schools was sought by direct questions to the students in attendance when the schools were visited. Replies as to intention to teach permanently have an important bearing upon certain administrative situations, and are discussed elsewhere.² Intentions as to teaching immediately on leaving the school were stated by all but six per cent of twenty-four hundred students, tho with much variation between the schools. Three-quarters of the men and nine-tenths of the women intend to teach, but here again wide differences appear. Nearly half of the secondary men reporting at Maryville will not teach, while at Springfield only one-seventh so reported. The women are in every case more generally committed to teaching than the men, tho less so at Maryville and Kirksville. Questions as to alternative occupations put to those not intending to teach show that not far from half both of men and women hope to go elsewhere to study; nearly one-third of the men will farm; the remainder indicate several different occupations.

STUDY ELSEWHERE

Questions as to intentions for further study disclose the extent of the influence of various institutions. About two-fifths of the collegiate men students and one-tenth of the secondary group are bound for some college or university. Over half of the men making this declaration name the University of Missouri; about one-third are undecided, and one-sixth prefer outside institutions. Two-fifths of the women expressing the intention to go to college incline to the University of Missouri, but more than one-quarter of them are going to Chicago, Columbia, or Wisconsin. Missouri institutions other than the state university interest about one per cent of the collegiate students in the normal schools who plan to do college work elsewhere.

¹ See pages 301 ff.

² See page 293.

STUDENTS AT HARRIS TEACHERS COLLEGE

The women studying at the Harris Teachers College ranged in age from seventeen to thirty-eight, but only eight per cent were over twenty-one; three-fourths were from eighteen to twenty. It is a town-bred group; only seven per cent grew up in the country. Over four-fifths were natives of Missouri, and all but four had their homes in St. Louis. Nearly two-thirds were of American stock; a few were of German and one of English parentage, and about thirty per cent were mixtures of these and other nationalities.

The fathers of these students were city workers; more than one-third were engaged in trade, one-fourth in manufacture and mechanical industries, nearly one-tenth in clerical occupations, and the same in various professions. Transportation and public service each engaged four per cent. In ten per cent of the cases the father was not living. The paternal income was generally given: fourteen hundred sixty dollars was the median figure; one-fifth received one thousand or less, and one-fourth over two thousand. The total family income was consistently higher throughout, with a median of seventeen hundred fifty dollars. In point of size the median family had four children; one-tenth had only one child, and one-fifth had more than five children; over one-tenth had eight or more.

The home environment in most cases was not academic. Only forty-three per cent of the fathers and thirty-nine per cent of the mothers had attended a high school; sixteen and nine per cent respectively had attended college, while eight and twelve per cent only had ever taught school. Altho the students at the state schools were largely from families some members of which had taught, the reverse is true at St. Louis. Almost eighty per cent of the families lacked any previous connections with school teaching. The remainder with two exceptions had members that had attended a normal school, all but one at Harris Teachers College.

Nine-tenths of the students came up thru the graded elementary schools alone, nearly all of them in St. Louis; the remaining tenth had attended likewise some rural school. All but three passed thru the St. Louis high schools, spending there four school years or more except in one case.

Asked why they planned to teach, about one-third of the students indicated financial reasons or desire for an occupation; two-thirds expressed in some form their personal preference, inclination, or fitness for teaching, or their fondness for children. Almost the same proportion, three-fifths, declared their intention to teach permanently. Notwithstanding the fact that less than one-third indicated financial reasons for teaching, fully eighty per cent felt that teaching was the best-paid employment open to them. Most of the rest believed that other professional service or some clerical occupation was more remunerative. Regarding their professional training, nine out of ten students considered what was asked of them as more difficult but also more interesting than their high school work; more difficult because of a curriculum crowded with urgent and unfamiliar exactions, more interesting because of "better

teachers," "more individual responsibility and use of reason," and "closer connection with future work,"—"more vital," "more practical."

Taken altogether these students are clearly as homogeneous a group as could easily be assembled for their purpose. Drawn from those ranking among the upper two-thirds of graduates from excellent high schools, they possess a fairly assured and tested foundation for special training. No small portion of their "immediate efficiency" is due to their inbred knowledge of the school system thru which they have come and in which they are presently to teach. The vocational motive is probably somewhat more conscious than in the state schools; at least the students themselves have had fewer family associations with teaching. Their even age, ability, and mental content make the task of the college relatively simple.

It may be seriously questioned whether this homogeneity, so favorable from many points of view, is not a serious disadvantage in important respects. Equality of age, general high ability, and similar educational initiation is obviously desirable; but that every teacher in the St. Louis elementary schools should have only the provincial mental content of one rooted in a single spot almost from birth is not so certain. In defence of this system of virtually absolute inbreeding it is urged that it is only the inbreeding of ideas that is dangerous, and that as the St. Louis child presumably has more varied ideas than one bred in the country or in a small town, he therefore possesses greater mental fertility. This theory appears to overlook the fact that the mere number of items within a person's horizon has little to do with his resourcefulness. The city child's big buildings, "flats," street cars, parades, and "movies" may blend together into an order of life that taken by itself is precisely as parochial as is the experience of the country boy for whom trees, animals, and open country furnish the principal details. It is only when one such well-understood order of life is imposed upon another that fresh mental combinations are liberated and true insight is made possible. In those who achieve distinction, this result is brought about thru change of residence, travel, study, reading, pictures, and so forth. St. Louis now takes persons whose minds already exactly mesh with the cogs of her present system, and seeks to develop new speeds and progressive attitudes thru two years of further contact with the same environment. It would be better for her schools if she had at her disposal a considerable number of teachers equally well trained, but completely ignorant of the St. Louis régime. "Immediate efficiency" that rests on such absolute habituation as the present conditions ensure, can hardly miss an unsound tendency toward reaction and stagnation.

A public sanction for the present exclusive arrangement, that is always present, and that has constantly to be combated by the school authorities, is the theory that Harris Teachers College is primarily a public vocational opportunity for St. Louis girls. Much opposition to the "upper two-thirds" rule, already referred to, has been encountered on this score, the best interests of the schools for which teachers are desired being lost sight of in the attractive idea of convenient breadwinning posi-

tions. A further consideration, of course, is that women living at home may be had on terms lower than the salaries for which teachers of equal training could be induced to come from outside.

The general situation at St. Louis confirms thoroughly sympathetic observers in the belief that the educational interests of the city as well as of the state at large¹ would ultimately be better served if the Harris Teachers College were a state institution, supported by general taxation but operated in close connection with the St. Louis city school system. It should then be open on attractive terms to candidates from all parts of the state, and from among these St. Louis, or any other Missouri city, could select the best teachers it could afford to pay. The training provided in the existing state schools is not at present such as St. Louis could profitably utilize. The time should soon come, however, when this can no longer be said; these schools should offer for the whole state a thorough, selective preparation suitable for a part, at least, of the staff in any great city.

It is impossible to close this section without an expression of appreciation of the character of the student body of the normal schools. In or out of the classroom, whether in conversation or unconscious of the observer, these boys and girls produced the impression of unlimited industry and a consuming purpose. Much of this, perhaps, is the result of sheer vocational impulse; certificates must be earned and maintained. But the larger significance of their opportunity is seldom absent, and the influence of individual teachers as well as, usually, the spirit of the school as a whole, continually emphasizes it. It would be difficult to propose a more appealing or responsive task for men and women of intellectual and moral power than well-administered professional relations with students of this sort.

¹ See page 60.

VII

CURRICULA OF THE NORMAL SCHOOLS

A. OUTSTANDING PROBLEMS IN THE CONSTRUCTION OF CURRICULA FOR THE PREPARATION OF TEACHERS

CONDITIONS in Missouri suggest several fundamental questions relating to the principles and policies of curriculum organization for institutions that prepare teachers. Particularly significant are the questions relating to: 1. Standards of admission; 2. Residence requirements; 3. Prescription *versus* election; and 4. The extent and criteria of curriculum differentiation.

1. *Standards of Admission*

PROFESSIONAL SUBJECT-MATTER WELL DEVELOPED

Among the factors that determine the length and content of a teacher's initial preparation, two are essential: the first is the extent to which the resources necessary for good teaching have been organized into disciplines that generate or promote the power to teach; the second is the extent to which society is willing to expend money in securing the advantage of these disciplines for the teachers of its children.

Fortunately there is no question as to the extent to which profitable subject-matter is available. Education is an old field in its philosophic aspects, and the scientific studies of the past twenty years have supplied a wealth of material concerning its resources, nature, and processes that has gone far toward its firm establishment on a scientific basis. For any grade of teaching the construction of a four-year professional curriculum is at best a difficult process of selection among apparently indispensable studies and experiences. To compass this in two years can be accomplished only by the frank sacrifice of matter of unquestionable importance and the reduction of what is retained to abbreviated summaries. The worth even of this training is amply proved, however, by the experience of schools everywhere accessible. Specific training was adopted first in large cities, and from there has been carried over to the smaller communities. Nowhere has a community, progressive in other respects, diminished the professional preparation given its school teachers. The education of the teacher has measured the quality of the school, and that in turn has been an almost unfailing index of the quality of the community. Everywhere the natural pressure and demand on the part of those responsible for education is for more and better preparation and not for less. This would not be the case if the training had failed to show good results. The consensus of intelligent opinion is that it does show good results, and, further, that in so far as the educative procedure appears defective, it is largely some deficiency in the character and amount of the preparation of the teacher that is responsible.

CHIEF QUESTION IS ONE OF PURCHASE AND DISTRIBUTION OF TRAINING

It is not a question, therefore, of the existence of effective tools, skill, and knowledge wherewith teachers can be equipped. It is a question simply whether the state as a whole will deny modern educational advantages to certain groups of its youth while they are enjoyed by other groups. St. Louis has had a large number of professionally trained teachers for many years, and recent tests of her public school system reveal the admirable quality of the results. She would prefer to pay twice their cost rather than revert to former conditions. Kansas City has more recently adopted the same policy. Educated elementary teachers are scattered thru other towns and cities in varying numbers, but outside of a few large towns the elementary schools are in general conducted by partially trained, or locally trained, or wholly untrained teachers, who are correspondingly inefficient. To be more exact, the conditions are as follows: Teachers of elementary schools with two or more years of professional preparation in advance of a high school curriculum constitute forty-one per cent of the total in St. Louis, twenty-three per cent in Kansas City, sixteen per cent in the smaller urban districts of the state, and a negligible proportion in the rural districts. These figures do not fully represent the case, however, for St. Louis, during recent years, has added well-trained teachers only, while the state at large is making no such progress.

For this situation there is no justification; it is a case of ample funds for well-prepared teachers in some quarters and meagre funds for poorly prepared teachers in others. The needs of the child in the small town or village are as great as those of the child in St. Louis; and the needs of the country lad are greater than either. Rural school teaching actually demands a higher grade of teaching efficiency than any other branch of public school service: the problems of successful organization and instruction are more varied and more difficult; the range of subject-matter in which the teacher should be "letter perfect" is wider; supervision is less frequent and usually less competent; and the responsibilities of the teacher for community leadership are much heavier. To meet these demands, teachers can be had; excellent training is available; the money cost is relatively unimportant to a wealthy state like Missouri; the only thing really lacking is the determination on the part of the state to give every child, wherever he may be, opportunities equal to those enjoyed in the centres of population that have developed a keener sense of responsibility than the state as a whole has felt for itself.

MISSOURI HAS TEMPORIZED WITH COMPROMISES

Instead of dealing with this problem in a businesslike and thoroughgoing manner, Missouri, like many other states, has temporized with a series of compromises, alleging that the more vigorous program was "impracticable." She has prided herself on legislation providing that by 1918 no person with less than a high school education receive high grade licenses, whereas such a limit is at best but a reasonable minimum for admission to training; and even this requirement is nullified to a considerable

degree by retaining the old third grade certificate intact for teachers with scarcely more than elementary schooling. In order to make high school graduates into teachers, the familiar expedient has been resorted to of giving them certain secondary courses at the hands of a special teacher, and a small appropriation is being annually devoted to this purpose. The establishment of these secondary agencies for the training of teachers, while doubtless productive of good in many backward districts, has occasionally had a distinctly unfortunate effect. The graduates of the high school training classes, usually town or city girls, have revealed the same unwillingness to enter the rural school service as have graduates of the state normal schools, and the pressure for the appointment of such graduates to positions in the home town and city systems where high school training classes have been organized is sometimes too insistent for the school authorities to resist successfully. This weakness can probably be improved by more skilful regulation, especially by recruiting country boys and girls for this work, but the only final solution is to place the preparation and the rewards for teaching in the rural schools on a level with conditions in any other group, or if necessary to grant an additional bonus to such teachers.¹

AN ADEQUATE POLICY NEEDED

In view of the whole situation it should be determined that admittedly low grade curricula shall not be tolerated longer than is necessary to remedy even more fundamental defects. States as widely different in the characteristics of their rural life as Massachusetts and California have succeeded in making high school graduation a prerequisite for admission to rural school training curricula, and Missouri can do the same. A persistent campaign for a larger and more skilfully distributed state school fund in such rich and prosperous states as Illinois, Iowa, Kansas, and Missouri, coupled with renewed and redoubled efforts to establish the principles of consolidation wherever consolidated schools are possible, should speedily render unnecessary the effort to provide professional preparation on the secondary level. The high school training classes have rendered an important service, but to consider them as a satisfactory and permanent solution of the problem would be to perpetuate a standard of preparation utterly inconsistent with the fundamental significance of rural education to the prosperity and welfare of the nation.

It should be borne in mind, of course, that a standard prerequisite for professional training implies a required training beyond that prerequisite. To set this fact in clear relief as well as to increase the emphasis upon the preparatory as distinct from the professional institution, it would undoubtedly be of great advantage completely to sever the two kinds of work, and to confine the normal schools strictly to higher professional instruction. As explained elsewhere,² this appears to be practicable in Missouri and should be carried out.

¹ This expedient has been tried successfully in Baltimore County, Maryland.

² See pages 166, 295, 300.

SHOULD PREPARATORY CURRICULA BE PRESCRIBED?

Assuming that the standard professional curriculum will require a measure of preparation equivalent at least to graduation from a four-year high school, the question arises: Shall the character of the preparatory curriculum be more specifically prescribed? There would, indeed, be many advantages in making requirements that would enable the normal schools and teachers colleges to omit from their professional curricula a number of purely academic subjects. On the other hand, definite prescriptions of courses that must be completed prior to entrance might necessitate an early vocational choice upon the part of the high school pupils, and thus, in effect, make the high school curriculum preparatory to normal school entrance essentially vocational. This would certainly be the case if the subjects taught in elementary schools were prescribed as part of the entrance requirements,—a policy that has been proposed on the ground that it would free the normal school from the necessity of offering review courses. In the mutual interests of both high school and normal school, as well as in justice to the secondary pupil, it is believed that the best preparation for the professional work of the normal school or of the teachers college would be a well-chosen program of general secondary studies rather than a specific and essentially vocational curriculum. From this point of view, there could be no objection to specifying among the admission requirements the satisfactory completion of certain courses characteristic of a liberal education: mathematics, one or more of the natural sciences, two or more units of history, and perhaps four units of English; but to specify spelling, arithmetic, or other elementary subjects would be to substitute their inferior treatment on a secondary level for serious professional attention later on. Furthermore, with a period of professional work in view, it is clearly unwise to force a vocational choice before the completion of secondary education. The problem of taking care of the necessary “reviews” of the common branches in curricula of collegiate grade will be discussed later.¹

While there are some who consider four years of secondary study as an unattainable prerequisite for professional work, there are a few who would increase this requirement by adding two years of general college education as the basis of admission to the professional curricula. This proposal is so closely involved with considerations affecting the nature of the professional curricula themselves that it seems appropriate to defer discussion of it to another publication.²

2. *Residence Requirements*

Two years of resident study at a training institution seem for the present to be a reasonable minimum for the preparation of all grades of elementary teachers, and should be systematically enforced by suitable certification. This, however, is but the

¹ See pages 149 f., 227.

² The Foundation has in progress a revision of its suggested *Curricula for the Professional Training of Teachers in American Public Schools*, in which this problem will be fully discussed.

beginning of a real solution of the problem of elementary instruction in Missouri, as in the United States as a whole. To meet the situation in fully adequate fashion, two fundamental demands must be satisfied: first, the school-going youth of the country must be provided with teachers selected for their natural fitness and in confident possession of such knowledge and skill as our best training can supply; and secondly, the service of such teachers must be prolonged to the point where, as in other professions, the accumulated power of successful experience may accrue to the permanent advancement of the cause they serve.

a. PROLONGED PREPARATION NEEDED FOR TEACHERS OF ALL GRADES ALIKE

In planning a program for the preparation of teachers for America one must be aware that all the hopes and ideals of our democratic society itself are bound up in the eventual result. If the supreme service of one generation to the next is to place it most advantageously upon the stage, that service can be concentrated and ensured nowhere so effectively as in the selection and preparation of the teachers to whom chiefly the task is delegated. Indeed, so far as education thru schools is concerned, the teacher is the sole channel of influence. It requires no argument, therefore, to convince a thoughtful American that any process that renders his agents who deal with oncoming youth conspicuously more successful in bringing to pass the ambitions of the present for the future, is a paramount consideration.

Such a process is emphatically the progressive education of a teacher in the content and significance of the social order that he is passing on for reproduction or betterment; such is likewise his refinement in knowledge of the physical and mental makeup of the child he teaches; such is certainly his observant study of skilled teachers and his own initiation under their leadership. As already pointed out, the sanction for all of this has been fully confirmed in the action of progressive communities everywhere. There is no longer any question of requiring that teachers be prepared; the really important question now pressing for answer is the question of the extent and application of this preparation among teachers of different grades or groups of children.

WHY LONGER TRAINING FOR HIGH SCHOOL TEACHING?

The best approach to a consideration of this problem may perhaps be made by facing frankly at once the concrete issue which throws it into high relief. An acceptable teacher in the ninth, tenth, eleventh, and twelfth grades of our public school system must have had four years of college training supplemented in the better institutions by a year or more of graduate work devoted to education and to the particular subjects to be taught. But from the first grade to the eighth inclusive a teacher with a normal school training of two years beyond the high school is officially satisfactory. What are the grounds for this remarkable distinction occurring sharply at the end of the eighth grade? In the order of their increasing probability the following explanations suggest themselves.

It is said that a longer and therefore presumably better training has been demanded for the teachers of the highest grades because there were fewer of them, and a more rigid selection was therefore possible and natural. There appears to be no valid reason for believing that this is true. Secondary teachers are indeed relatively fewer than elementary teachers because the number of secondary pupils has been and is proportionately smaller, but if the inference of better training were correct, it would hold good also as between eighth grade teachers and primary teachers where the same relative disparity in numbers exists. It might be sought for the same reason between teachers in the twelfth and those in the ninth grades, even in spite of the departmental character of this work. No such distinction in length of training is to be found at these other points. In fact, the training of the primary teacher is the one phase of preparation for elementary instruction that has been clearly differentiated from all others and given special emphasis. Plausible as the suggested distinction may appear at first glance, there seems to be no good reason why a group of public servants should be better prepared for its work simply because the group is small, tho that fact may of course facilitate selection occurring for other reasons.

IS HIGH SCHOOL INSTRUCTION MORE "ADVANCED"?

A second suggestion frequently offered as a sufficient reason for the distinction in question is that the work of the four higher grades, commonly known collectively as the "high school," is "advanced" work and therefore requires the "advanced" preparation of a college course. And it is thereby implied that elementary instruction is "elementary" work and requires but "elementary" preparation or perhaps only "ordinary common sense." Historically there is much truth in this explanation. For a long period high school teaching could be prepared for only in college, while no college concerned itself seriously either with the studies or with the pupils of the elementary school. As the normal schools gradually made good their function, the studies and pupils of the elementary school became the centre of their attention. Partly for this reason and partly because the colossal size and strangeness of the new problem led many normal schools into obviously superficial and futile practices, the whole movement was ignored and often actively misunderstood by the colleges; even to-day many college teachers and officers are uninformed as to its achievement and unimpressed by its real significance.

The work of the normal schools, extended and systematized by university and college departments of education, has brought into being a type of preparation fully as indispensable to the elementary teacher and to society as a college course can possibly be to the high school instructor. The work of one has become as "advanced" as that of the other, tho it deals with different materials. Compared with the secondary teacher, whose field is narrowly limited, the competent lower grade instructor must possess a sure mastery in a relatively wide range of subjects,—a mastery that the present brief training restricts almost to the bare material to be taught. The tech-

nical difficulties of teaching and of class management appreciably increase in passing from the higher to the middle levels of public school instruction; the equipment of the elementary teacher in skilful technique must therefore be correspondingly greater. In contrast with the strong natural sympathy existing between the well-chosen adult teacher and the mature or adolescent youth, a teacher of younger children finds a competent knowledge of his pupils and a permanent interest in them to be a more remote and more difficult acquisition that must be sustained, if at all, by motives implying a large social horizon and purpose. The lack of this, due to insufficient education, is precisely the secret of the mechanical and commonplace older "grade" teacher, familiar to every observer.

In the lower grades—primary and lower intermediate—the problems of management recede in importance, or are at least less obtrusive, thus giving color to the popular idea that the teacher's task is simpler. Here the real need of skill in teaching and especially of trained insight into the mental differences of growing children stands out in all its significance. School systems in general have been organized to fit their weakest point, which is in the intermediate grades. Teachers that are inefficiently or mechanically trained make necessary the rigid curriculum with its allotted pages, identical for each of many varied minds; the mechanical supervision laid on firmly from without is inevitable, and the result is the dead average of mass-progress. To be able to treat third grade children intelligently as individuals, and to be safely entrusted with the adaptation of educational materials to their varying capacities, requires an ability that may be had thru education, but that to-day scarcely exists in these lower grades, and is rarely to be found in the elementary school at all. Because bright children can run unschooled until the age of ten or twelve and then be "brought up" to their classes without great loss of time, it is argued that, after all, the early grades are unnecessary except for the average or dull pupil. This is an undoubted fact, but by another inference the whole evil situation is contained in the irony of it. It is nonsense to suppose that under good conditions a teacher who knew her business could not have given the bright child the lead that his capacity warranted. With apparently little formal effort, the educated and sympathetic parent brings him along so fast that he is obliged to stay out until the lock-step of the school catches up. The relatively unskilled teacher of to-day, with the best of intentions, wastes the capable child's time precisely because the real nature of her business is still a riddle to her, and what insight she may have bears slight fruit because of a system organized to operate irrespective of insight on her part. So far as the work itself is concerned, therefore, it must be contended that there is no longer any teaching position in the list for which "advanced" preparation may justly and profitably be denied in favor of any other.

SOCIAL DISTINCTIONS IMPLIED BETWEEN ELEMENTARY AND HIGH SCHOOLS

A third ground for the traditional distinction in the training of high school teachers is rather more difficult of analysis, and is much less freely recognized than the one

just discussed. After its inception the modern high school quickly became, like its predecessor the academy, the special *protégé* of the institution next above it. Where high schools did not exist, preparatory departments in the college itself took their place, as in the University of Missouri and other Missouri colleges. The early status of the high school, then, was that of an institution suspended from the college in the darkness beneath; not until it became full-formed and established did it tend to build itself up out of a vigorous common school pressure from below, and even so, up nearly to the present day, it has clung to the college for sanction of its aims, methods, and program. The inevitable result of this intimate relationship was that the high school was regarded and in fact became, like the college, the institution for the education of children from relatively wealthy and cultured social groups. The public character of the school considerably enlarged the circle, to be sure, but only those could attend who, tho perhaps not destined for college, were at least able to command the necessary leisure and support for study during four years above the elementary school. The impulse to provide this, even at a sacrifice, was found chiefly in homes of considerable refinement until the high school added a form of training that met a purely vocational need and appealed to a different type of parent.

Thus grew the tradition of a public school, proudly alleged to be for all, but actually patronized by the wealthier and better educated elements in American life, and playing but a slight part in the existence of the great majority of the people. For these the "common" school did service. Often shunned in the largest cities, tho less so where the population was more homogeneous, this outpost of civilized life has been alternately the hope and the despair of all who trusted in it as the means for attaining true democracy. With splendid ideals and obvious possibilities, by resting heavily on the power of its traditional appeal, this often crude and awkward servant of the state has accomplished on the whole an important service in spite of the wooden system in which it is sometimes wedged, its often thoroughly mechanical processes, and its subjection to the constant interference of the incompetent. Its worth has been almost wholly positive; its failure, tho apparent, has been a failure in degree only.

THE ELEMENTARY TEACHER *versus* THE HIGH SCHOOL TEACHER

The two institutions — high school and "common" school — are completely revealed in their teachers. Beginning abruptly with the ninth grade, where compulsory education commonly ceases, the teachers must be college graduates and therefore supposedly well initiated into the world of letters and culture. It has not till lately been thought to matter much whether the teacher was prepared to teach; it sufficed if he held a diploma. Most older secondary teachers are painfully aware that their professional training began when they commenced to teach; they may even be proud of the various subjects that they suddenly "worked up" out of a forgotten or wholly vacant past. Nevertheless, the teachers in our high schools and academies have been men and women more or less at home in the best intellectual life of their generation. Their

varied studies, their college associates, their institutional and social experiences have made them in a small way people of "affairs,"—literary, political, social, and even commercial,—representing interests to which the high school student ardently aspires. They may blunder egregiously in teaching, but even the blunderers possess usually something in their personal background that saves them from total failure. The stronger schools require evidence of successful experience in their teachers, and the tendency of recent regulations has been to require specific preparation for specific positions, and still more recently to require graduate study and directed practice work. The service offers, in its better positions, an agreeable and respected career in close contact with collegiate interests. Such are the teachers who deal with the selected youth from the better American homes.

Below the ninth grade attendance is commonly compulsory for all children for whom no other provision is made. Teachers for these grades are recruited from high school graduates who are given at most something over a year of specific preparation for teaching the elementary school subjects—followed by a period of supervised practice in the schools. Sometimes the latter is concurrent with study or interwoven with it, both requiring not more than two years in all. Married women are not desired in the service; since nearly all elementary school teachers are women, the average tenure of these teachers, trained and untrained, is about four years.¹ The conditions of the service are exacting; the hours are long, the constant contact with all types of childhood is very trying to any but the soundest nerves, the extra demands upon a teacher's time and energy for both school and pupil are incessant, and the financial reward is utterly insignificant. The net result of the circumstances is that the majority of the teachers in these grades seek the work solely from an economic motive, expecting or hoping that it will be temporary. Training is given with this in mind. From the normal school's standpoint it is concentrated on meeting in the shortest possible time certain irreducible minima in the way of standards; from the student's point of view it represents simply the condition of securing a license. Compared with even two years of the four spent in college, the intellectual interests awakened are incidental and fugitive instead of central and cumulative; mental stimuli received in high school cease for lack of attention. Instead of persisting, like Alma Mater, a life-long shrine of high thought and feeling, the training school, once finished, ceases to figure in the teacher's thought, and his aspirations wither, lacking sure attachment. Whether a teacher for three years or thirty, such a brief and concentrated treatment disposes one blindly to reverence routine, to follow and to require specific directions, to eye too carefully the sources of approval or censure; in short, to fit the system, and, worst of all, to make unintelligent supervision easy. If the work becomes permanent, the uncertain attitude of the early years may be thrown off and real growth may result. If so, it must still spring by will and brain from the thin soil of scant initial training. The common

¹ This average includes rural school teachers. The elementary teachers in the larger cities have a longer average "life"—probably between eight and ten years.

alternative is to make the prescribed procedure automatic and to employ the mind elsewhere. Such is the teacher on whose instruction the attendance of children thru eight of the most critical years of their lives is expected, and in Missouri, outside of St. Louis and Kansas City, such a teacher receives annually for her services a salary of \$450.¹

CONTRAST IN TEACHERS THE CHIEF OBSTACLE TO PROGRESS

This contrast between the teachers of a selected group destined to furnish the leaders of society and those provided for the balance of the population is naturally most keenly felt by the teachers themselves. The prestige of a high school instructorship quite outranks that of a "grade" teacher's position in popular respect, and must, of course, do so until training and compensation are equalized and the two schools are merged in a single institution. To pass from an elementary school position to the high school, as has been possible in small country high schools, or in city schools by securing additional training, is rated as promotion to the disparagement of the "inferior" job. *Educationally this situation constitutes at present perhaps the greatest single obstacle to progress. As long as the situation requires that a teacher rise by changing his work instead of by capitalizing his experience and improving his work, little genuine progress toward professional efficiency can be realized.*

DISTINCTIONS IN TRAINING SHOULD DISAPPEAR

The deductions to be drawn from this brief review of public school cleavage must be fully apparent. The present conditions cannot last in a republic pledged to American principles. The advantages of appropriate adolescent education from the fourteenth to the eighteenth year, which are now theoretically open to each child, must actually be placed in his possession. The same curriculum for all during these years is absurd; but an education equally genuine and thorough for all alike and modified only by the proved abilities of the child must be provided for every boy and girl in the country thru their eighteenth year, and must be required of them if the United States is to face the new world-era a fit and competent nation. This education will necessarily assume many forms. The only form that it may not assume is one that permits the social and financial status of an undeveloped youth to determine his future. Thoroughly exploited and completely discredited in Europe, this system will yield here, where its roots are weak, to an educational faith and policy whereby the leadership that emerges shall be that of sheer mental, moral, and physical excellence.

The executor of this future is the teacher and no other. Created and supported according to whatever vision prevails, it is he who determines the result. In making

¹ This is the median annual salary of the women teachers in graded elementary schools who have had two or more years of training in addition to four years of high school. Such teachers number only sixteen per cent of the total; the remainder lack so much training, but owing to a certificate system that penalizes proper preparation, they receive nearly the same salary. The median is exactly the same, but thirty-five per cent only of the second group receive more than \$450 as compared with forty-nine per cent of the first group.

secondary education compulsory it is obvious that, to accomplish our final purpose, the best present standard of training for the secondary teacher must be maintained — that is, four or five years of organized and pertinent preparation. It should be equally obvious that the problem of elementary instruction cannot be said to have been solved until the training of elementary teachers is fully established upon a like basis. This done, the American system of education becomes intelligible and defensible: a twelve-year period of growth and training under superior conditions for every child, administered by a special class of teachers selected for similar and representative character and power, and amply trained for their purpose; men and women who are permanent and resourceful students of their work, seeking a possibly equal distinction of service and reward alike within all grades and subjects of instruction, and professionally organized for the continued advancement of American schools.

Whether the accomplishment of the program outlined above is a matter of ten years or of fifty is not our immediate concern; it is necessary, however, to discern clearly the goal toward which we ought to strive. Certain communities, like St. Louis, are already asking whether a longer training for elementary teachers is not desirable, and if so, what form it shall take. New York State is on the eve of converting its two-year normal school curriculum into a three-year curriculum to be required of all elementary teachers in graded schools. Massachusetts, in her state normal schools, has organized three-year courses for upper grade elementary teachers; Rhode Island is likewise upon a three-year basis; and scattered beginnings of the same sort are observable elsewhere. The feeling is general that, altho the trained elementary teachers are doing technically better work than the untrained high school teachers, they are seriously lacking in substantial education, and the proposed lengthening of the curriculum is intended partially to remedy this defect. High school teachers, on the other hand, are under no such pressure to lengthen their preparation in point of time. Progress for them hinges upon the reorganization of their curriculum for a definite objective and the provision of real professional training comparable to that which the best elementary teachers already enjoy. Were there apparent a clear tendency toward requiring additional years, toward making a doctor's degree, for example, a qualification for secondary instruction, the inference would be natural that the preparation for secondary work was destined to maintain its old relative advantage. This is not the case. Even the fifth year required of secondary teachers in California, in Rhode Island (for state scholarships), and in some other communities, was added rather in order to secure professional training without disturbing the unity of the college curriculum than because a successful secondary teacher could not be well prepared in four years, if provided with a curriculum planned for the purpose. The indications are rather that, without prejudice to the secondary instructor, the work of his colleague in the elementary school will be regarded as of equal importance, specialization being relied upon to provide for the greater intensiveness of the secondary teacher's task, and both candidates being required to work out a careful technique suited to their respective fields.

THE OUTLOOK FOR SUCH A PROGRAM

It is improbable that the adoption of lengthened curricula for prospective elementary teachers will be in any sense the slow and painful evolution that has brought us to our present stage. What was once the gradual attainment of separate progressive communities, an enlightened state now accomplishes at a single stroke. The old laborious methods of educational progress are unnecessary when the principle is plain and a commonwealth is fully persuaded; radical and adequate action must shortly take the place of the piecemeal legislation that forever falls short. This fact should encourage state and institutional administrators in comprehensive planning for the future. There must indeed be a rational sequence in the steps taken, the first of which was indicated at the beginning of the present section. It should, however, be clearly understood that this is but a step in a much larger program to follow.

b. ADEQUATE RESIDENCE REQUIREMENTS DEPEND UPON PROSPECT OF EXTENDED SERVICE

The second fundamental rearrangement that must be effected before the requirements of prolonged resident training can be reasonably enforced is a lengthened term of teachers' service. It appears unlikely that under present or predictable economic conditions the service of competent men in the elementary schools will assume any but negligible proportions except for administration and, here and there, for special undertakings with boys. It is true that in the newer portions of the country men are still to be found teaching in the elementary schools, as in Missouri, but their number has diminished steadily.¹ In general, the men who can be obtained for regular instruction at prevailing salaries prove inferior to their women colleagues, and the disadvantage of "feminization," whatever it may be, would be ill remedied by entrusting children to weak teachers simply because they are men.

For the present, at least, the obvious and necessary solution of the problem lies in a quite different direction; namely, in the recognition and development of teaching as a permanent and serious profession for capable women who are attracted thereby, wholly irrespective of their marriage. The enforcement of this point of view has so vital a connection with the extension of residence requirements as well as with the spirit and organization of curricula for the preparation of teachers that the considerations on which it rests may well be presented at this point.

SERVICE OF WOMEN NOW TERMINATES WITH MARRIAGE

It is a widespread practice among American school boards to consider a woman teacher's marriage as equivalent to resignation. Where not expressly provided in formal regulations, the policy is often tacitly pursued by refusal to reappoint. It is safe to say that the initial appointment of married women except when widowed or clearly unencumbered with family duties is very rare. The usual justification for

¹ The proportion of men in the teaching body has decreased since 1900 by 10.3 per cent in the country at large and by 13.5 per cent in Missouri. *Report of the United States Commissioner of Education, 1917.*

this practice is based on one of three grounds. The reason most frequently heard is the familiar frank interpretation of tax-paid positions as a proper perquisite for the needy citizen. A married woman is presumably provided for; therefore let some young girl have the job.¹ A second ground for objection is characteristic particularly of school superintendents, and is to the effect that the work of married teachers is more difficult to regulate, and that such teachers have meddlesome and redoubtable allies in the persons of their husbands. A third objection to employing married teachers is the general and sound social conviction that it is the first business of a married woman to look after her home, and this duty is considered to be impossible of fulfilment if the woman holds a teaching position.

REASONS OFFERED FOR THE PRESENT PRACTICE

The first of these objections is held by a class of individuals with whom argument is impossible; the only remedy is time, which may be trusted gradually to substitute another point of view toward all public service. A certain warrant for the second attitude undoubtedly exists in experience under conditions that have prevailed in many parts of the country. Inferior teachers, or those that have become inferior thru ceasing to grow, entrench themselves in a community thru long, albeit dull and inefficient, service. The very presence of a home with husband and family gives them a substantial status and a following. When occasion arises to exclude such a teacher, a noisy protest ensues from all the partisans, most of whom are wholly ignorant of educational standards if not of the specific circumstances, and if the administration holds its ground, a situation may arise that nearly wrecks the system. In reply to this it may be said that such episodes are characteristic of school systems in which a mechanical tenure prevails, where the notion that teachers stand or fall according to the excellence of their work has little root in the schools and none in the community. Such cases fall of their own weight when a school administration keeps unremittingly before both teachers and citizens the conception that teachers exist for the good of the pupils; when good work is carefully and persistently held up to view; when the standards of selection are high; and when parents are made fully aware that meritorious teaching is their due. It requires intelligence to do this. A higher order of mental ability and training is necessary to lead and direct well-developed personalities having local professional standing as a result of acknowledged achievement, than will suffice to handle a group of young girls coming from without, who have no immediate friends and make no trouble when dismissed. The supply of superintendents of this type is unfortunately limited, but it is increasing. Except in sporadic cases, this objection, like the first, harks back to the time when fitness and

¹ An unexpected illustration of this attitude appears in a recent action (September, 1918) of the Boston School Committee. The rule against married teachers appears to have been in part suspended owing to war conditions. But the Committee refused at first to suspend the rule in the case of the wife of a commissioned officer, on the ground, as quoted in a newspaper interview with one of the members, that she was already sufficiently provided for. The appointment was subsequently allowed, but only in order to conform to an assurance of the Superintendent to the teacher in question before her marriage.

training were undiscovered elements in a candidate's qualifications, while the comfort of the board in its relations with insistent citizens, or the convenience of the superintendent in running his machine, was actually the determining factor.

WILL THE MARRIED TEACHER NEGLECT HER HOME?

The third consideration is of different character and should be seriously studied. It is urged that, for a married woman with a family, teaching necessarily involves neglect of the home which should be her paramount consideration. An indispensable premise to any argument to the contrary must be that the question has to do only with a woman well trained for professional life and whose occupation up to the time of her marriage was the education of children. It must be assumed further that she has been a skilful teacher and that she thoroughly enjoys her work, so that her motive in continuing is not merely economic advantage. Women to whom this does not apply clearly should not teach. A large number of well-educated women will undoubtedly find complete satisfaction solely in the high art of making and maintaining a successful home. One of the finest products of modern higher education for women has been the worth and dignity that it has revealed in this undertaking. For the woman first described, however, the domestic situation is a complete brief in favor of her further teaching service. Her income from teaching produces more than the amount necessary to effect the household arrangements that her absence requires, and thereby possibly delivers her from a round of petty duties that might be performed equally well or better by some assistant—duties that are often in irritating contrast to the intellectual concerns of an educated woman before she marries, even if they do not actually lead to disappointment and stagnation. Meanwhile the teacher's professional work maintains and develops in her an intellectual freshness and skill that makes her a superior guide for her own children as well as a more interesting companion for her husband. Trained to systematic mental activity in the problems of education, she is now also director of a private laboratory where these problems work out, and her partial detachment in teaching gives her a clearer vision and perspective than is possible to a mother unassisted and constantly immersed in household detail—the usual alternative. With the family grown and gone, the situation of the teacher-mother is incomparably superior to that of the mother-housemaid. Her connections with the world are stronger and more significant, her grip on vital interests is surer, and her satisfactions in life are more durable; she is spared the desultory “busy-work” of the mother whose mentality has been exhausted in housework; and she has before her ten or twenty years of acknowledged usefulness that is the logical cumulation of a life of directed study, service, and experience.

WILL THE MARRIED WOMAN PROVE A LESS EFFICIENT TEACHER?

The other and, for our purpose, more serious charge is that a married woman would allow home duties to interfere with her school duties and thus become a less efficient

teacher. Again it must be assumed that we deal here with well trained and successful teachers who like their work, for only such teachers should pass the probationary stage—whether married or single. It is scarcely probable that such teachers with well-developed professional ideals will permit causes of undue interference with their duties to continue long even if they arise. However, an argument of perfection can hardly be turned against married teachers at this point. It is quite conceivable that domestic or private concerns might create occasional diversion, but the same thing occurs repeatedly with unmarried women teachers and even with men. It seems needless to press this point. The whole tendency of marriage for both men and women is to steady and objectify one's effort, to sift out trivial and careless aims, and to lay down lines of growth into a consistent and unified career. To discredit this fact in favor of young, unmarried women, without serious responsibility or experience, and at a period of conspicuously uncertain and distracted interest, is a manifest absurdity.

MARRIAGE AN ADVANTAGEOUS QUALIFICATION FOR A TEACHER OF CHILDREN

On the other hand, there is probably no work to which marriage and a normal home life could contribute a qualification more essential than they could to teaching; tho not without its application to men in dealing with adolescents, it would appear well-nigh indispensable for women in the intelligent handling of small children. In an educated and professionally well-trained woman, marriage and the deepening experiences of motherhood could not but serve to clarify her insight, to broaden and humanize her sympathy, and to intensify devotion to her central purpose,—a purpose that would then link together and coördinate the processes of both home and school. This latter result would appear particularly in the transformed relation between the school teacher and the community. At present she figures as a detached public servant in a class apart. If married and a householder having children, she becomes a vitally interested and respected factor in society. With an education superior to that of most other women, she possesses, by virtue of her quasi-public position, unusual opportunities for leadership and influence and would undoubtedly improve them. A town whose schools were taught by its most capable and best educated married women would, assuming that these were also well trained for teaching, give the country a totally fresh and significant interpretation of public education. Such a relation would carry the schools straight to the heart of society's most responsible group, and would make them immeasurably more responsive to the public needs.

ENORMOUS WASTE OF THE PRESENT SYSTEM

Important as the above considerations are, the weightiest practical reason for the married teacher is still another. The largest source of waste that our present system of teacher supply involves is the waste of experience incurred in the loss each year of

from one-fifth to one-fourth of the entire teaching population. The average teacher no sooner becomes fairly efficient than she leaves the service,¹ giving way to a recruit who repeats the same mistakes of apprenticeship, leaving in her turn before these mistakes can be transmuted into matured skill. The very nature of the selection that produces this loss seems to ensure the heaviest draft upon the best grades of ability in the teaching personnel. Those with the most active, the most thoughtful and forceful minds, those who are most attractive and resourceful in dealing with children, are oftenest among those that leave, and because they are successful, even under the present hard conditions, they most frequently leave with regret. By encouraging the best teachers either thru added salary or shorter hours, or both, to continue in the profession after their marriage, this constant drain will be partially stopped as the class of selected, permanent workers increases.

CONSERVATION OF PROFESSIONAL EFFORT IN EUROPE

The present system is productive of a further loss, the effect of which may be understood only by comparing American conditions with those prevailing on the Continent of Europe. There the great majority of the teachers are men. They assume their duties with the knowledge that teaching is to be the life work for which they have received a long and appropriate training. No sooner do they become established in their positions than they unite, with few exceptions, in teachers' societies that have for their object the study and promotion of the schools they teach. These organizations are incessantly busy. From them proceed the most effective criticisms of current practice and carefully studied experiments directed toward improvement. As the body of teachers is permanent, this mass of experience is cumulative, fine traditions are created, and the teacher in service is educated, sometimes in spite of himself, to a very high level of performance. As in the university and secondary schools abroad, so it is in the elementary schools: the teachers themselves control and develop in great part the function that they discharge.

ABSENCE OF ORGANIZED EFFORT AMONG ELEMENTARY TEACHERS IN AMERICA

Consider the situation among the agents of elementary instruction in the United States. With much shifting from place to place they are in and out of school work altogether in half the time that a child is expected to spend with them. Professional coherence and activity does not and cannot exist; there is no time for the great cause they are supposed to serve to take root in their imaginations; they move as individuals without collective force or expression, completely at the mercy of the principals and superintendents, good and bad, who direct them. Higher education with us is self-directive; secondary education is partly so; while the average elementary teacher is

¹ This statement is more than merely figuratively true. The "average" elementary teacher does not serve more than four years, and the studies of teacher-rating justify the inference that, in the average of cases, about four years of experience are essential to the development of teaching skill to the point where it will be rated as superior by competent supervisors.

voiceless except in cities, where she lends herself automatically to a perennial agitation for more salary.

MARRIED TEACHERS WOULD REQUIRE BETTER CONDITIONS

If this situation can be corrected at all, it must be as above stated, namely, by making a life career of teaching possible and attractive to successful women. Under present conditions it is not probable that many teachers of the kind desired would continue to teach after their marriage even if the opportunity were given. This is decidedly in their favor and against present conditions. Children need strong, rested, and clear-seeing teachers; instead of which the present régime is likely to produce teachers who are inclined to weariness, nervous tension, and depression. A part-time plan for teachers would be harder to carry out, but the actual results would undoubtedly be a great gain. Better forty positions with a short day for skilled, experienced, and finely productive married women, whose ability has made them a permanent and recognized asset in the community, than a fluctuating, overworked group of twenty young apprentices of doubtful intentions and divided interests.

EFFECT OF PROLONGED TENURE ON TRAINING

The effect of this point of view upon the professional curriculum is apparent. Many normal schools to-day herd their students, much as many superintendents herd their teachers. The demand presses; all sorts of material must be utilized; each teacher produced is presumably short-lived so far as service goes and must soon be replaced. There prevail, therefore, all the usual evils of mass production for the temporary repair of excessive wastage: slighted preparation, poor selection, hurried processes, lax inspection, and much false branding of finished goods. Given the new motive, however, each training agency could seriously set out to make genuine teachers. A discriminating choice of students, a deliberate, ripened training, and a thorough testing of the product would be worth while in preparing a teacher to face her peculiar profession of school and home education as a man faces medicine or law. The necessity of longer training for longer service would be manifest; fewer new teachers would be required; more could be expected of the profession itself in the form of continuous and organized self-criticism and growth.

3. Prescription versus Election of Studies

A striking difference between the state normal schools of Missouri and the city training schools of St. Louis and Kansas City is the closely prescribed programs of the latter as compared with the largely elective programs of the former. Various reasons are assigned in explanation of this difference. The city training schools prepare for a clearly defined type of service. The students will presently teach a prescribed and uniform elementary curriculum based upon uniform textbooks. Their preparation,

consequently, calls for a very specific treatment of the field. The state normal schools, on the other hand, endeavor to prepare for high school teaching as well as for service in elementary schools, and in the preparation even of elementary teachers, they have believed that the logic of their situation required them to aim toward an adaptability that would enable their graduates to meet varying situations. It is not clear, however, that this need of ensuring elasticity has been the primary reason for the normal schools' adoption of the elective system. The interlocking organization of the one-year, two-year, three-year, and four-year curricula, referred to later,¹ provides for a gradual accumulation of credits representing work which may transform a teacher of elementary subjects into a high school specialist. For this purpose as well as to allow for the intermittent attendance encouraged by the state schools, the elective system offers the simplest plan for organizing a program of studies. Beyond this, and perhaps still more influential in determining the procedure, has been a somewhat unreflective imitation by the normal schools of the curriculum policies characteristic of the liberal-arts colleges. The normal schools, it is true, have sought to justify this imitation, in so far as the elective system is concerned, by insisting that the needs of the individual are always of paramount consideration. If this principle could be effectively offset by a complementary postulate that would safeguard the needs of the service for which these individuals are being prepared, there could be no objection to it; but to make these adjustments involves difficulties quite as serious as those that are encountered in administering a prescribed curriculum in a way that will not do injustice to the individual. The typical student programs cited elsewhere² abundantly testify that the Missouri normal schools have not succeeded in solving the problem in a satisfactory manner. A final factor in determining the adoption of the elective system has been the desire of the normal schools to have their courses articulate closely with those of the universities, to which many of their students expect to go.

DEFINITION OF PRESCRIPTION

When the question is considered from a purely objective standpoint, however, it is fair to ask whether, as a matter of general policy, prescribed curricula are not both theoretically and practically preferable either to the elective system or to the group-requirement system for institutions that prepare teachers. Under the assumption that the institution is really what it purports to be,—namely, a strictly professional school, preparing for clearly defined and fairly well-standardized types of public service,—is it not advisable to lay down systematic programs of instruction and training, each of which shall comprise the materials that experience has shown to be most clearly related to the specific field of service that the student proposes to enter? This does not mean that deviations from the prescribed curricula should not be permitted; it means rather that these deviations should be clearly consistent with the needs both of the individual and of the service, that they should be subject

¹ See page 162.

² See pages 411-417.

neither to the whim of the student nor to the accident of class hours, and that they should be permitted only with the approval of an official or a committee acting under rules laid down by faculty action. With such a provision, carefully and sincerely administered, the prescriptive system would acquire much of the elasticity that is the important advantage of the elective plan, and would avoid its evils. The more serious disadvantages of the elective and group-requirement systems may be summarized as follows.

THEORY OF "EQUIVALENCE" OF COURSES FOR PROFESSIONAL PURPOSES

Both systems imply an equivalence of educational values among different courses which on their face are not equivalent in their value as preparation for specific types of teaching. It is in this connection that the weakness of the group system is most apparent. The natural sciences, for example, frequently constitute a single group, and a student is required to take so many semester hours of "science." In the eyes of those who make this indiscriminate requirement, it is apparently not the content or subject-matter of the science courses that is important; the "discipline" of scientific method is the ostensible end sought. From this point of view, all of the sciences are assumed to stand upon the same level. But in the preparation of teachers for the specific work of imparting instruction, the nature of the subject-matter can never be the relatively unimportant factor that the theory of formal discipline would assume, and the particular sciences that are to find a place in a teacher-training curriculum cannot so nonchalantly be made a minor consideration on the easy assumption that "it is the training that counts," and that for purposes of training "one science is just as good as another." Similar allotments of a stated number of hours in the social sciences, or even in the narrower field of history, are equally inadequate to the needs of specific preparation for the work of teaching.

The inappropriateness of choice resulting from group election would of itself be sufficient to condemn the system; but its case is still worse when it is remembered that these group requirements are often mere compromises among contending academic departments, each of which zealously presses its own claims for recognition. On this basis the outcome has relatively little educational value. Whatever may be the evils of the system in tempting the instructor to offer "snap" courses, it is clear that the prescribed program removes all such inducement. It also has the effect of concentrating the teacher's entire attention on improving the quality of the regular standard courses for which he is responsible instead of placing a premium upon variety which is bound to be more or less experimental in character.

THE PROFESSIONAL STUDENT NOT QUALIFIED TO ELECT

Both systems imply a mistaken trust in the ability of the relatively immature student to determine not only what is best for him as an individual but, in institutions preparing for public service, what is best for the service—a far more delicate and

important matter. Even when choices are subject to the approval of faculty advisers, the advice is not infrequently influenced by partisan or departmental motives that tend to overshadow the fundamental needs both of the individual and of the schools in which he will teach; while in some cases the advice is purely perfunctory, the student really electing subjects as he chooses or under the adventitious controls represented by one's favorite class-hours, the popularity or unpopularity of certain instructors, or even the place of the subject in the schedule of final examinations. If, however, curricula are prescribed with minute care and are subject to change only by approval of an official or a committee acting under carefully formulated rules, there is every likelihood that principles of educational value will be much more adequately reflected, both in the prescriptions themselves and in the substitutions that are permitted.

SEQUENCE DIFFICULT TO MAINTAIN

A most serious objection to the elective and group systems is the difficulty in preserving the essential sequences in courses. An attempt is often made to meet this need by stating prerequisites, altho in the Missouri normal schools these are not substantial either as stated in the catalogues or as enforced in practice. The prescriptive policy, tempered as has been suggested by the permission of changes under stated rules, places primary emphasis upon sequence and order, and then examines each claim for exemption or substitution upon its own individual merits.

IS THE ATTITUDE OF THE STUDENT IMPROVED BY ELECTION?

There are certain alleged advantages of the elective and group systems that merit attention in this connection. It has been urged that under the elective system the attitude of the student is more favorable; he believes that his studies are of his own choosing, and consequently, it is asserted, his work is more whole-hearted and thorough. A careful search was made for evidences of greater interest and enthusiasm among the students of the state normal schools as compared with the students of the city training schools with their rigidly prescribed curricula. If there were any differences, they were distinctly not to the disadvantage of the city training schools,—altho it cannot be asserted that the policy of prescription had in any sense a causal influence. Interest, enthusiasm, and hard work are elements that, in so far as they depend upon the exercise of the student's choice, are the product of his initial decision as to the goal at which he hopes to arrive. A student chooses whether he will study law or medicine, or whether he will become a primary or an upper grade teacher, and works more happily when his goal inspires him; but with his choice once made, any clear-headed professional student would rather undertake the studies that a competent authority tells him he needs than wander unguided thru a program whose values he cannot possibly predetermine.

EFFECT OF ELECTION ON "INITIATIVE"

A second supposed merit of the elective and group systems is really a specific expression of an educational doctrine accepted by many as axiomatic. Freedom, it is asserted, promotes the development of that valuable quality known as "initiative," while prescription with its restrictions tends to choke originality and to predispose the student to a more or less blind acceptance of authority. No one would deny the general validity of this position, but much confusion is likely to result from an indiscriminating application of the implied principle to the work of education. Each of the words "freedom," "initiative," "originality," and "restrictions" may be applied to situations having diametrically opposite meanings, and there will always be a temptation to profit by these possibilities of equivocation, especially in utilizing the principle to support loose and careless practices or to cloak the unwillingness of those in authority to assume a corresponding measure of responsibility. Freedom that the truth has made is confused with mere lack of direction; "initiative and originality" in putting together a bizarre program of studies is substituted for aggressive mental comprehension under competent leadership, and administrative laziness makes it an august pedagogical principle to allow students to do as they please. It is clear that any principle, however valid in the abstract, must be applied with caution whenever it can be used easily to conceal or to sanction the path of least resistance. As a matter of fact, there is no evidence that carefully constructed and intelligently administered curricula of the prescribed type in technical and professional schools exert a deleterious influence upon initiative and originality, and there is an abundance of evidence that system, order, and a willingness to undergo discipline are likely to go hand in hand with constructive ability of the highest character.¹

Whatever may be the virtues of the elective and group-requirement systems in institutions of general education, their place in professional and technical education would seem to be narrowly limited. As an administrative device for facilitating the construction of individual curricula, the group system especially may have legitimate uses, but even here the many advantages of definitely prescribed curricula made up of carefully selected and well-articulated courses would amply compensate for the difficulties that are likely to be encountered in their construction and administration.

4. The Extent and Criteria of Curriculum Differentiation

In constructing a comprehensive program of studies for the professional preparation of teachers two important questions relating to differentiation arise: (1) How are curricula for teachers to be differentiated in general from curricula that are non-vocational or liberal in their purpose? and (2) What different kinds of specific curricula are essential to a preparation of public school teachers that will adequately meet current needs?

¹Cf. an illuminating article by E. L. Thorndike, "Education for Initiative and Originality," *Teachers College Record*, November, 1916.

a. INCIDENTAL versus ORGANIZED PROFESSIONAL TRAINING

Opinion relative to the first question is divided between (*a*) those who maintain that the best training for a teacher is essentially a "general" education with emphasis upon the subject-matter to be taught, but with added courses in educational theory and practice, and (*b*) those who hold that the curriculum should be constructed throughout, academic and professional subjects alike, with a view to the needs of those who are planning to teach. The former point of view has naturally been emphasized by the liberal-arts colleges that have recognized the importance of preparing teachers; the latter point of view is characteristic of certain, altho by no means all, of the normal schools.

That a teacher should have the broadest possible foundation in scholarship has never been seriously disputed, but there are varying opinions as to the meaning of "broad scholarship," and the particular meaning that any one person gives to the term is likely to be misinterpreted and exaggerated by others. Those who plead for extensive information as an essential basis for all teaching are likely to be accused of favoring a superficial acquaintance with many different fields of knowledge, while those who lay the emphasis upon depth and accuracy are met with the charge of narrowness and pedantry. There has been, and still is, among college faculties a decided prejudice against the normal schools for leaning toward the superficial, while principals of high schools have not hesitated to accuse college-trained teachers of having no interest save in the advanced phases of their own specialties. In each case the criticism, while justified in particular instances, has usually been generalized to an unwarrantable extent, but the situation that actually exists reveals the need of a more definite agreement as to the kind and amount of "broad scholarship" that a teacher should possess.

We have already concluded that the specific preparation for teaching should be based upon a general or liberal education equivalent to that represented by graduation from a four-year high school. We may assume that this implies an acquaintance with the chief departments of knowledge as these are presented in a secondary school. If a curriculum for teachers involves only two years of study beyond the high school, it is clear that the bulk of this time must be given to the intensive mastery of the specific subject-matter to be taught and to the essential minimum of work in educational theory and practice. But the specific subject-matter that is taught in the elementary school is by no means narrow in its scope, and the courses presenting this subject-matter assuredly need not be lacking in the breadth and enrichment characteristic of liberal studies.

This point of view, which some American normal schools have recognized in theory, and which a few have successfully reflected in their practice, merits serious consideration. Is it possible so to organize the content of elementary school studies that normal school students undertaking these courses shall not merely "review" previously gained knowledge, but rather acquire what will be substantially "new

views" of familiar matter as well as much genuinely fresh knowledge? Can such courses induce a quality of mental effort and ensure a degree of mental growth equivalent to that which is implied in the courses now recognized as of collegiate texture?

ARITHMETIC

In arithmetic, for example, the teacher needs to "know" the process of long division, let us say, in the sense of understanding clearly the reasons for the several steps involved, and of having a reasonable degree of skill in applying the process quickly and accurately. Beyond this, however, he should understand the mathematical logic of the process; he should know how it evolved, and particularly the disadvantages of the more cumbrous processes that preceded it. He thus acquires a quite new view of something with which he already has, in his own judgment, a considerable measure of familiarity. His added knowledge may not include materials which, as a teacher of elementary arithmetic, he will pass on to his pupils, but it will deepen his appreciation of the importance of what he does pass on, and it will clarify his own understanding of the process itself. An analogous treatment may well be accorded to every topic represented in the subject. Even the primary teacher, struggling with the development of the simplest number concepts and processes, will find new insight and inspiration for her work in a knowledge of primitive number systems and of the steps that the race traversed in its development of the existing system of notation and numeration. If to these genetic studies one adds relevant excursions into the psychology of number, especially in connection with tests and scales, it is clear that a course of distinctly advanced character and quality is obtained, all of which serves the teacher's ultimate need. In treating the more advanced topics, emphasis laid upon industrial applications, the construction and use of commercial devices, and similar topics, brings a significant extension of one's range of knowledge. The equivalence of such a course to algebra or solid geometry is irrelevant; in respect to the enlargement of one's intellectual horizon, its contribution is evident, and its appropriateness for the purpose in view need not detract from its value.

OTHER ELEMENTARY SUBJECTS

Similarly a course in literature for children offered to prospective teachers should involve much more than a study of literature in the form in which little children will assimilate it. The very fact that many of the poems and stories of childhood are among the oldest and most persistent products of the world's culture suggests at once the wealth of material available for a teachers' course in this subject. It goes without saying that a teacher can use this literature with children more effectively if he knows its antecedents and origins, and consequently realizes that he is dealing, not with trivial materials valuable simply because they are adapted to immature minds, but rather with a significant and precious human heritage. Certainly in its

cultural quality a course of this type may easily be made to compare favorably with any collegiate course in mythology or folk-lore.

The opportunities in connection with history are equally numerous. The elementary school teacher needs a basis in historical knowledge much broader than that which the historical content of the elementary program represents. A part of this basis will be furnished by the courses in history that he has completed in the high school; but beyond this, there must be a comprehensive and illuminating study of the elementary materials themselves, involving a knowledge of movements and causal relationships which could not be included in the elementary program, but which will aid in making elementary teaching effective; and involving, too, a much more serious effort to make the past really "live" than the ordinary college course usually attempts. Thus the ideal course in history provided for prospective elementary school teachers will differ from the ordinary college course dealing with the same materials, but it should be no less replete with enlarging experience, and certainly no less worthy of collegiate rating.

The possibility of organizing collegiate courses for teachers in such subjects as geography, nature study, and physiology and hygiene is even more apparent than in connection with arithmetic, literature, and history. In each case there is a distinct need of a course or of several courses differentiated in important respects from corresponding courses organized from the point of view of the typical liberal-arts college, but in each case, also, it is apparent that the essential differentiations do not mean that the differentiated courses shall cease to embody the accepted principle that all teachers should possess a substantial basis in genuine scholarship.

HIGH SCHOOL SUBJECTS

We have been speaking hitherto of courses for prospective elementary school teachers. Will the preparation of high school teachers involve a similar need of subject-matter courses differentiated from courses in the liberal-arts colleges? It may be urged that as regards both the materials themselves and their organization for teaching, the high school courses in literature, the sciences, mathematics, and history do not differ essentially from collegiate courses in the same subjects. Indeed, except in the case of mathematics, the ordinary subjects of the high school program may be found under the same names on the collegiate list, while the more advanced collegiate courses are in many cases only expansions of topics treated more briefly in the introductory courses. Thus it might be inferred that the typical collegiate courses would form an adequate preparation for teaching the corresponding subjects in the high school. To this it must be objected that the organization of its courses on the collegiate model has been one of the most serious weaknesses of the high school, that modern tendencies in high school development emphasize a type of organization more closely correlated with the needs and abilities of secondary pupils,

and that, consistently with this tendency, special courses for prospective high school teachers should be differentiated to a very appreciable degree from corresponding courses in liberal-arts colleges. There is, in fact, an urgent need for specific courses of collegiate character covering the subject-matter of the secondary program, much as the courses described above are conceived to cover the subject-matter of the elementary program. The high school teacher of mathematics, for example, should surely undertake mathematical studies well in advance of those that he proposes to teach, and it is quite possible that the content of these advanced courses should be modified by the fact that he is to teach high school mathematics. But in any case he needs courses in elementary algebra and in plane geometry which will not only refresh his mind with regard to elementary principles and processes, but will also give him a much deeper and broader conception of principles and a much more facile mastery of processes than his earlier secondary course could possibly give. Such courses should emphasize the historical development of these elementary processes, and they should lay stress particularly upon the possibilities and methods of illuminating instruction by the applications of elementary mathematics to a wide variety of scientific, technical, and industrial problems.

SPECIAL CURRICULA IN NORMAL SCHOOLS FOR HIGH SCHOOL TEACHERS

If it is true that the subject-matter for prospective high school teachers should be differentiated from the corresponding subject-matter taught from the standpoint of the liberal-arts college, there may be a distinct place for the preparation of high school teachers in at least some of the normal schools, and certainly for the development of differentiated teachers colleges in the universities. On the other hand, if subject-matter courses do not need to be modified for the preparation of high school teachers, a policy which favors the extensive use of the normal schools for this purpose implies that much of the work of these schools looking toward the training of high school teachers will be a duplication of the work of the liberal-arts colleges. Inasmuch as certain normal schools are now engaged in the preparation of high school teachers, it would seem advisable to emphasize clearly in some of these normal schools the principle of differentiation referred to above,—that is, definitely modifying all courses with reference to their bearing upon the problem of high school teaching. The products of these schools could then be compared with the products of the liberal-arts colleges and of other normal schools in which the subject-matter courses are replicas of those offered in the liberal-arts colleges. How far the present organization of subject-matter courses in the Missouri normal schools will serve the purposes of such a test is a question that will be considered in a later section of this report.¹

¹ See pages 228 ff.

ADVANTAGE OF DIFFERENTIATION

The great advantage of the differentiations proposed is that they permit the construction of a thoroughly integrated curriculum which, in its turn, serves to concentrate all of the work of the student upon a unified problem. Whenever such concentration is possible it is obviously the method of educational organization that will yield the largest returns. When a student enters upon a program of studies that is clearly professional, the time has come for this essential concentration. A teacher as a teacher needs what we know as the liberal studies, but just because his need is a professional need, the pursuit of these studies by the prospective teacher may profitably, and should logically, differ in important respects from their pursuit by students who necessarily regard them from a non-professional point of view. A student of chemistry, for example, if he proposes to be a textile expert, fixes his attention primarily on the processes as they may be of use to him in a future career; his business is to have the formulae at his command. If, however, he be intending to teach chemistry, his business is to watch also the organization and sequence of material as it affects his own learning process in order that he may help others to master it with a minimum of effort; he seeks to comprehend the related fields as thoroughly as possible in order to make the central course suggestive and significant; as a prospective teacher he undertakes consciously to analyze and assimilate the learner's whole need and point of view.

b. DEGREE OF DIFFERENTIATION REQUIRED

The second problem relative to differentiation has to do with the number of specialized curricula that are essential in a comprehensive system for the preparation of teachers. Present practice distinguishes sharply between the preparation of high school teachers and the preparation of elementary teachers; and, with less vigor, in the preparation of high school teachers as among the various subjects or groups of cognate subjects. There seems, further, to be a general agreement that, in the preparation of elementary teachers, the specific training for kindergarten and primary work should be provided for in a separate curriculum. A third type of differentiation, already well recognized, provides separate curricula for prospective teachers and supervisors of the so-called "special subjects,"—agriculture, drawing, household arts, industrial arts, music, and physical education.

It is clear, then, that the general principle of specific training for specific types of teaching service already has a substantial basis both in theory and in practice. In two large and important divisions of the service, however, this principle has not as yet been generally applied. We refer, first, to elementary teaching beyond the first and second grades, and, second, to the administrative work represented by the elementary principalship, the high school principalship, and the superintendency. In a third division of the service—namely rural school teaching—the principle of specific preparation has been recognized, but rather from the point of view of immediate expediency than from a clear acceptance of rural school teaching as a distinctive field.

MIDDLE AND UPPER GRADES STILL FORM A SINGLE FIELD

If present practice correctly reflects underlying theory, it is apparently believed that the professional preparation of all candidates for elementary teaching beyond the primary grades is adequately accomplished by a single undifferentiated curriculum. This point of view has undoubtedly been determined largely by factors that are primarily administrative in their character. The immature and inexperienced teachers entering graded school systems have been assigned first to the middle grades, particularly to the third and fourth. Those who are successful here, and who remain in the system, have been fairly certain of "promotion" to the first grade or to the upper grades. The specialization of preparation for primary work has modified this situation in some measure, altho teachers who have not had this specialized preparation are still frequently transferred from the intermediate to the primary grades. In general, however, the middle grades have come to be looked upon as the training ground of the novice, and in consequence any proposal to differentiate as between intermediate grade teachers and upper grade teachers in the construction of normal school curricula runs sharply counter to an administrative practice that has developed to a point where it is virtually "taken for granted."

The extent to which this situation must be considered in any discussion of professional curricula is made plain in the statistics showing the distribution of teachers in the various elementary grades in respect to age, experience, and salary. Tables presented in the report¹ of the Illinois School Survey, based upon data from 2670 teachers in the graded town and city elementary schools of the state, indicate that the median age of teachers in the lower intermediate grades is ten years lower than the median age of upper grade teachers (VII and VIII) and two years lower than the median age of teachers in the primary grades (I and II). Furthermore the median age of teachers in the higher intermediate grades (V and VI), while somewhat above that of third grade and fourth grade teachers and of the primary teachers, is still significantly lower than that of the upper grade teachers. Corresponding differences exist among these groups in respect to experience and present salary.²

The situation in Missouri is not essentially different. The following table, for example, shows a clear tendency in both St. Louis and Kansas City to place the more immature and inexperienced teachers in the middle grades, reserving the primary and upper grades for the teachers who have served their apprenticeship and demonstrated their fitness for what are looked upon as the more difficult and more responsible types of work:

¹ *The Illinois School Survey*, Bloomington, 1917, pages 117 ff.

² The comparisons are shown in the following table:

<i>Teachers in Rooms representing Grades</i>	<i>Median Age</i>	<i>Median Years Experience</i>	<i>Median Salary</i>
I, I and II, II	23	9	\$576-\$625
II and III, III, III and IV	26	6	526- 575
IV, IV and V, V	26	7	576- 625
V and VI, VI, VI and VII	30	10	626- 675
VII, VII and VIII, VIII	36	15	676- 725

<i>Grade</i>	<i>Median Age of Teachers</i>		<i>Median Years Experience</i>		<i>Salary Range Middle 50% of Teachers</i>	
	<i>St. Louis</i>	<i>Kansas City</i>	<i>St. Louis</i>	<i>Kansas City</i>	<i>St. Louis</i>	<i>Kansas City</i>
Kindergarten	35	28	12	4	—	—
1st grade	31	36	10 (+)	14	\$951-\$1200	\$801-\$1000
2d grade	26	25	8	8	751- 1100	701- 1000
3d grade	26	26	6	8	751- 1100	751- 1000
4th grade	26	28	7	10	751- 1100	801- 1000
5th grade	29	33	10	13	951- 1100	901- 1000
6th grade	30	36	10 (+)	16 (+)	951- 1100	951- 1000
7th grade	31	40	10 (+)	18	951- 1200	1001- 1050
8th grade ¹	41	1	20	1	1001- 1300	1

MENTAL AND PHYSICAL CONSIDERATIONS WARRANT DIFFERENTIATION

We have referred to administrative expediency as the primary factor determining this anomalous position of the intermediate grades. Certainly educational principles could hardly be advanced in its support. The mental and physical characteristics of children between the ages of eight and twelve differentiate this period sharply both from the preceding school period, between the ages of six and eight, and from the following period of adolescence, and clearly indicate that the educational treatment of children during these years involves specialized problems that should not be confused with the problems of either early childhood or adolescence. This conclusion is certainly justified by the evidence already available, altho in general the period has been almost as seriously neglected in theory and in investigation as in school practice.

The work of the elementary school, as at present constituted, therefore, falls into three well-marked divisions, each coinciding with fairly definite "nodes" in the mental and physical development of the child. One should no more expect identity in the qualifications needed for success in teaching the fourth grade and the eighth grade, or the third grade and the seventh grade, than one expects identity in the qualifications requisite for success in primary teaching and eighth grade teaching, or for success in sixth grade teaching and high school teaching. The differences involved are neither superficial nor negligible; they are vital distinctions that inhere in the very nature of child development itself, and should be recognized by specific treatment in curricula constructed for the purpose. This done, the present practice of recruiting the upper grade positions from the ranks of successful intermediate grade teachers would necessarily be abandoned. Intermediate grade work would acquire the same dignity and status as a recognized field for specialization that primary work and upper grade work already enjoy. The upper grade positions would be filled by the appointment of normal school graduates who had similarly made a special study of upper grade problems, and the marked discrepancies as to age, salary, and experience between eighth grade teachers and intermediate grade teachers would disappear.

¹ The elementary schools of Kansas City do not include the eighth grade, and the sixth and seventh grades become in consequence the "upper grades."

OBJECTIONS TO DIFFERENTIATION

The arguments against this extension of the principle of differentiation deserve serious consideration. Many will urge that it would be disadvantageous as compared with the present arrangement in that mature and experienced teachers now in charge of the upper grades would give place to immature and inexperienced teachers who would much better start with the third, fourth, or fifth grades and then work up into the more responsible positions. But it is this assumption that the higher grades are essentially more responsible positions that does the mischief. Certainly there would seem to be little justification for the fact that the eighth grade teachers in St. Louis are as a group fifteen years older than intermediate grade teachers, and have back of them twice the experience of the latter group, unless it is that these older and more experienced teachers are needed at the end of the elementary school course in order to correct the defects due to less expert teaching in the middle grades.¹ The provision of specific curricula for the preparation of intermediate grade teachers, by placing the work of these grades upon a professional basis, would tend to correct this condition, just as specific curricula for upper grade teaching would largely offset the lack of experience on the part of young teachers there.

CHOICE OF SERVICE DIFFICULT

A second argument against the proposal to specialize intermediate grade teaching emphasizes the difficulty of making a choice among different types of service at or near the beginning of the normal school training. Students fresh from the high schools, it is urged, will have but small basis for determining whether they are best fitted for one or another of the three types of elementary service. This objection, however, loses much of its force when it is recalled that the principle of differentiated training is already accepted. In entering many normal schools now, students must decide between the curriculum for primary teachers and the general curriculum representing the remaining grades of the elementary school, and students commit themselves to high school work, and make their decisions regarding the subject or subjects of special study, long before they have tried themselves in practice. In these cases there is little evidence that this necessity of making a choice fairly early in the period of professional training works hardships that are in any sense commensurate with the advantages that inhere in specific preparation for a relatively narrow range of service. Finally, an institution for the preparation of teachers may well provide for a term or a semester of common courses before differentiation begins, thus enabling the school to enlighten the student as to the character of the differentiated curricula, and otherwise to help him in making a wise choice.

¹ It should be remembered that few eighth grade teachers in St. Louis have administrative responsibilities; practically all schools are in charge of supervising principals.

KNOWLEDGE TOO SPECIALIZED

A third objection to the proposal is based upon the advantage of having every teacher of the elementary school somewhat familiar with the work of all grades. This advantage is not to be questioned, but as an argument it holds against the differentiations already recognized just as strongly as it would hold against the proposed additional differentiations. It remains a stubborn fact that two years' time is totally insufficient to give a teacher adequate preparation for teaching at every point in the elementary system. A teacher can in that time, however, acquire a reasonable facility in handling two or three grades well. If by subsequent extension courses, or better by prolonged initial training, more can be done, it is doubtless desirable to extend a teacher's practical knowledge over a considerable range. Even so, it is a serious question whether the entire elementary field is not altogether too large for the random practice of one person, however well trained. The superintendent who desires that a novice be trained for all the grades is looking for an administrative convenience coached to "fit in" anywhere at once and expected to acquire real training thru experience. He has no idea of utilizing the teacher's practical versatility after she is once placed, hence her varied training does little to offset the lack of intensive acquaintance with her real work. The need at present in every case is, first, for courses common to all specialized curricula, dealing with the organization of the public school system as a complete educational unit, and, second, for an especial effort in the construction of each specialized curriculum to give the prospective teacher an intimate acquaintance with the grades immediately preceding and following those in which the chief service is expected to lie. A primary teachers' curriculum, for example, should provide for a study of third grade and fourth grade problems as well as for a more detailed study of the work of the kindergarten, the first grade, and the second grade; the intermediate curriculum, while emphasizing the specific problems of the third, fourth, fifth, and sixth grades, should also furnish the student with a perspective of the primary and upper grade programs; and the upper grade curriculum should neglect neither intermediate grade work nor ninth grade work. But these overlappings should be designed in every case for the especial purpose of enlightenment; they should not be expected to furnish practical efficiency in the additional grades,—a result to be sought only in longer training.

DIFFICULTY OF ADJUSTING SUPPLY AND DEMAND

A fourth and final objection points to the complicated problem of supply and demand, and asks what assurance a teacher who pursues a specialized curriculum will have of employment in his chosen field. Again, this argument would not affect the proposed differentiations any more than it affects those now existing, unless it be assumed that the upper grade curriculum will attract a disproportionate number of candidates, and that intermediate grade teaching will always be the least attractive. There is, however, every reason to believe that a curriculum that really dignifies the work of

the intermediate grades will, with the gradual equalization of rewards, attract its due proportion of candidates, and that the initial difficulties which may be involved in the present lack of recognition will be offset largely by the more numerous opportunities for appointment. It should be said, further, that any system of highly differentiated curricula implies, both in the schools and in the state's department of education, a knowledge and control alike of candidates and of available teaching positions considerably more complete than is now the case. Needs of individual schools and of the state as a whole should be followed with sufficient care to enable the several training agencies to estimate with fair exactness about how many teachers of each type will be required in a given year. This information can be obtained by any state, and if properly utilized would reduce the inequalities of supply and demand to a minimum.

CHARACTER AND EXTENT OF LEGITIMATE DIFFERENTIATION OF TRAINING

A brief reference may be made to the type of differentiation desirable in these specialized curricula for intermediate grade teachers. Following the suggestions made above¹ with regard to the organization of subject-matter courses for prospective teachers, the first distinct need in the intermediate grade curriculum is for courses that represent on the collegiate level the specific subjects of the intermediate program. That most of these subjects differ considerably in materials and methods of presentation from corresponding subjects of the seventh and eighth grades, a brief study of any well-constructed elementary syllabus will quickly reveal. The preparation of the prospective teacher for dealing effectively with the instruction of the intermediate grades in history, for example, will involve an acquaintance particularly with biographical materials, and with the concrete details of social life in Greece and Rome, in mediaeval Europe, in England of the sixteenth, seventeenth, and eighteenth centuries, and in colonial America. It is not urged that the teacher should know only this type of history, but inasmuch as the history taught in the intermediate grades necessarily makes the largest use of materials of this type, the teacher of these grades should "know" history from this point of view.

Corresponding differences in treatment are indicated in connection with the teacher's courses in geography. The intermediate grade teacher needs especially wealth and accuracy of concrete information concerning the environment in which he is teaching in order that he may lead the pupils who are just beginning the study of geography from a knowledge of familiar things to an understanding of what is remote; and while the course in intermediate geography cannot reflect the environment of every community in which the graduates of the school will teach, it can train the student in the art of utilizing many types of environmental materials for educative purposes. Beyond this the teacher of the intermediate grades should be well equipped with accurate and concrete knowledge concerning the various peoples of the world, and especially concerning domestic customs and child life. The upper grade teacher, on

¹ See pages 149 ff.

the other hand, will have to undertake a more thoroughly systematized presentation of geographical materials in which causal relationships find an important place; his preparation, then, will place the heavier emphasis upon commercial and industrial geography, with especial attention to the fundamental principles that form the important geographical "controls."

In respect to arithmetic, the features that distinguish the two fields from each other are confined chiefly to methods of teaching and concrete applications. It is, indeed, in the organization of materials for teaching that the differentiations in all of the subject-matter courses will be most sharply drawn. The distinctions should not be rigid or artificial. Some courses may be profitably considered as constants in all curricula for teachers; other courses may be offered to combined sections, or at least without necessary segregation, for a part of the time, grouping students according to their different curricula only whenever specialized treatment becomes essential. With a limited purpose clearly fixed, significant elements of differentiation will be suggested in abundance by further study of the distinctive characteristics of children at the various stages of elementary education. It is expert familiarity with these finer traits of a child's development and ability to turn them to his advantage that marks the professional teacher.

Curricula so diversified as those that have been suggested must naturally be more or less provisional; they are, however, a consistent extension of a movement that has in its inception been highly beneficial. The single curriculum plan has been appreciably modified in this country by the general recognition of specialized training for primary teachers. This movement toward differentiation has been notably successful in raising the standards and enhancing the dignity of service in the primary grades; and it is only reasonable to assume that a similar specialization of the other clearly marked divisions of elementary teaching will have an analogous effect.

SPECIALIZED PREPARATION FOR ADMINISTRATION

The lack of adequate provisions for the specific preparation of superintendents and principals is due to the interplay of several factors. In the first place the specialized study and investigation of administrative problems is a recent development, having made little more than a beginning a decade ago. The materials for a specialized curriculum have therefore been meagre, until lately. In the second place, the superintendency itself has not demanded so much in the way of specialized knowledge as in the way of personal qualifications,—tact, common-sense, and ability to deal with men and women. With no objective methods of measuring the efficiency of a school or a school system, the real professional qualifications of the administrative officer were matters that could not be clearly defined or emphasized. In the third place, and largely as a consequence of these two factors, the tenure of the superintendency has been and still is most insecure. The "life" of the average superintendent of schools in the Middle West in so far as continuous service in any one

community is concerned was computed in 1914 to be four years.¹ The present study of conditions in Missouri shows that the typical superintendent in 1915 had at the age of thirty-six served as superintendent in two different towns or cities, including the one then employing him, and that the average of the periods of continuous service was three years.²

The conditions that have kept school administration from a true professional status, however, are rapidly passing. The applications of statistical methods to the analysis of complicated problems of gradation and promotion of pupils, retardation and elimination, the rating of teachers, and the measurement of achievements in school subjects, as well as the gratifying advances in school sanitation, school accounting, and the wider use of the school plant, have resulted in a large and essential body of knowledge already available for specific administrative courses. Such courses are now among the most important offerings of university departments and schools of education, but their organization with other types of material into formal curricula has not as yet been seriously attempted. The preparation of school administrators has made rapid progress within the past five years, but the progress has been confined chiefly to passing on the fruits of these recent developments to superintendents and principals already engaged in supervisory work. Curricula that will formulate the strictly professional training of men and women for this work before they assume supervisory positions seem to be the next step in this development.

SPECIALIZED PREPARATION FOR RURAL SCHOOL TEACHERS

Specialized curricula for rural school teachers are not uncommon in American normal schools, but, as has been suggested, the differentiation has been determined largely by the need of preparing immature students for temporary service in this field rather than by a recognition of the field itself as worthy of extended, specialized treatment. In Missouri, for example, the "rural-certificate course" in the normal schools is offered only on the secondary level. Indeed, the students of collegiate rank who are preparing for rural school teaching in the normal schools of the United States would probably not number five hundred all told,—yet the rural school service itself, according to the Commissioner of Education, requires more than one hundred thousand recruits each year!

The neglect by the normal schools of serious preparation for rural school teaching is due primarily, of course, to the low status to which the rural school is at present assigned. It is inconceivable that the schools in which more than one-half of the nation's children receive all of their schooling will be permitted to continue upon this low level of efficiency. When the people awaken to the fact that a large proportion

¹ From an unpublished study of 590 superintendents by E. L. Lawson at the University of Illinois.

² These figures are for one hundred forty-three superintendents in systems having first class high schools. In systems with second class schools the typical superintendent was thirty-four years old, and had held but one position for two years. In systems with third class schools he was thirty years old and had held two positions for one year each.

of the illiteracy and other evidences of educational deficiency revealed by the army tests is due first and last to the weakness of the rural school, they will quickly find a means of remedying the situation. Whatever remedy they adopt will depend for its efficiency upon securing a mature, well-prepared, and relatively permanent body of teachers for the rural service. The cost of such a reform will be negligible in comparison with the benefits involved.

For the preparation of such teachers, the normal schools should even now begin to offer carefully constructed curricula, coördinate in every way with the curricula for urban teachers. This would mean curricula that are based upon graduation from a four-year high school, and that require for completion at least two full years of residence. Even a period of this length is all too brief for a preparation that should be at once broader and more intensive than that required of teachers in the graded elementary school or the urban high school. Two years, therefore, should be but a temporary minimum. Ultimately, as has been suggested in an earlier section, the preparation of the rural school teachers, like the preparation of urban elementary teachers, should comprise not less than four years of specialized work beyond high school graduation.

B. ORGANIZATION OF CURRICULA IN THE STATE NORMAL SCHOOLS AND CITY TRAINING SCHOOLS OF MISSOURI

1. *Curricula as Wholes*

a. GENERAL CHARACTERISTICS OF THE NORMAL SCHOOL CURRICULA

It would be unjust to criticise in a captious spirit the normal schools either of Missouri or of the country at large for failing to meet the ideals and standards set forth in the preceding pages. Generally speaking, those responsible for normal school development have sincerely and devotedly struggled to ensure from the meagre appropriations made for their institutions the largest possible service to the people. Differences of opinion have naturally arisen as to the specific type of service that would be most valuable. Some normal schools have centred their efforts on improving the teaching in the lower schools, and they have consistently held to this as their function. Other normal schools have considered it their chief duty to assist in as many ways as possible the individual students who have come to them for instruction.

PERSONAL WELFARE OF THE STUDENT PLACED ABOVE NEEDS OF THE SERVICE

Institutions of the latter type have, consciously or unconsciously, placed the welfare of the individual above the welfare of the teaching service which the student is presumably to enter. They have recognized, effectually if not explicitly, that this service upon its lower levels does not offer attractive opportunities for a life career. They have accepted the estimate that the public itself has placed upon public service

in the elementary schools, and especially in the rural schools, when it permits these fields to remain barren of attractive rewards, open to low grade teaching ability, and subject to the waste and inefficiency that go with the brief tenure of the average teacher. Forsaking, therefore, the demands of the service engaging their students, these schools have devoted themselves frankly to providing the education that would give the students the careers they sought, relying on the theory that the person with the greatest amount of general education would of necessity prove to be the best teacher.

Any criticisms of the normal school for neglecting or belittling the field of elementary teaching should take into account this attitude on the part of the public. But after giving to this factor all of the consideration that it deserves, there still remains a conviction that these schools have acquiesced too readily in a situation the transformation of which one might justly assume to be their duty. It is their failure to assert themselves in behalf of the massive but inchoate elementary and rural school systems that strikes one most forcibly. They have been content to follow the tide of public opinion rather than to assume a position of leadership in moulding and directing that opinion. There is an unmistakable note of weakness in the following extract from a letter written by the president of a large middle western normal school concerning the suggestion that the normal school faculties throughout the country might profitably coöperate in the construction of something approaching "standardized" normal school curricula:

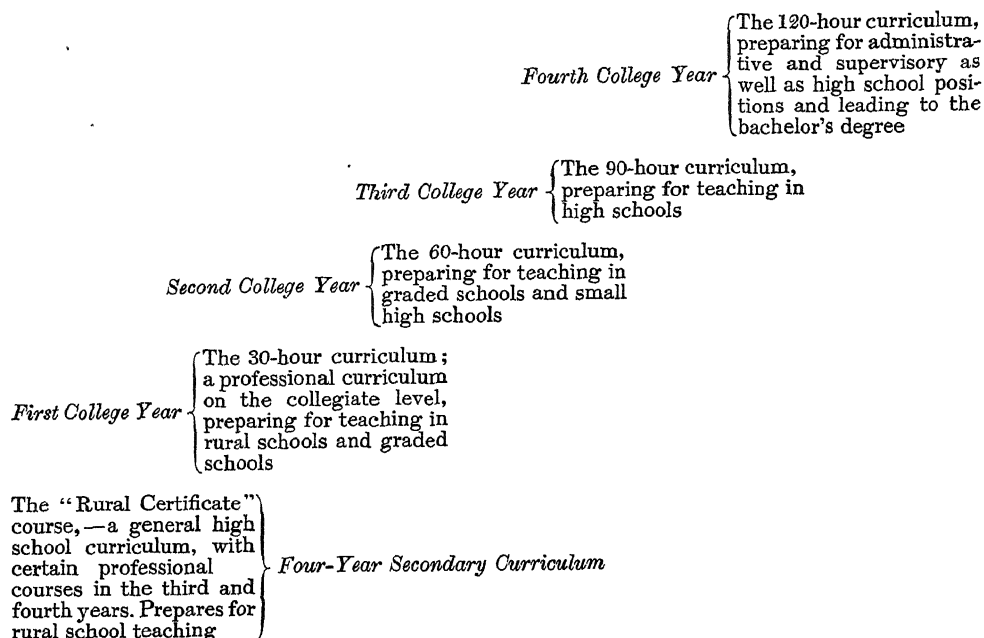
"I may be wrong but I think these problems should be settled by the legislatures and by the people thru the common school demands more than by any committee of faculties or experts that may be organized. Our present legislature is remodeling in some respects our educational system. This school will be compelled to follow that remodeling in every particular if our graduates are to be recognized and accepted in the service that the state expects."

That a normal school supported by the state must obey the mandates of the people as expressed thru the legislature goes without saying. But it is quite as true that it should have had a very considerable hand in inspiring and formulating those mandates.

"LADDER OF PROMOTION" IN MISSOURI NORMAL SCHOOLS

The state normal schools of Missouri, considered as a group, have followed the individualistic policy. The general scheme of curriculum organization that was formally adopted by a conference of the normal school presidents in 1914, tho actually in use for many years preceding, is based upon the assumption that many, if not most, of the students will not undertake two, three, or four consecutive years of study, but will rather remain in residence for a relatively brief period,—perhaps a term, perhaps a year,—then teach for a year or two, return to the school for another period of study, again teach, and repeat this alternation until the desired certificate has been obtained,

or until the ambition to continue study has died away.¹ In order to meet the demands of this numerous group of students, the several curricula are so arranged as to form a stairway from which one may gradually pass from rural school teaching to graded school teaching, and thence to high school teaching, or to supervisory work. The various "curricula" and the "advancement" that each offers over its predecessor are indicated in the following diagram:



It is evident that this ladder-like organization of the curricula is of very great advantage to the ambitious student who is unable to pursue his studies for four consecutive years. It not only incites him to a gradual and progressive accumulation of credits, but it definitely "motivates" each successive stage of advancement in that each curriculum increment when completed will both provide the means of earning money for further schooling and also pave the way educationally for the next step.

EFFECT UPON THE SCHOOLS UNFORTUNATE

But while the arrangement may be advantageous to the individual student, its ultimate consequences to the public schools are not so fortunate. It deliberately makes the service of teaching on the earlier age levels and grade levels a means of promotion to the later age and grade levels. Furthermore, each unit of study must aim to fulfil

¹ For example, the Cape Girardeau catalogue (1916, pages 29 ff.) says *apropos* of the thirty-hour curriculum: "This curriculum is arranged to equip students who cannot complete enough work for graduation with a sufficient preparation to enable them to teach acceptably in public schools until they can continue their work to prepare them better for teaching."

two functions, (*a*) prepare the student to teach upon one of the earlier teaching levels, and (*b*) prepare him for advanced study in a quite different field. One or the other of these functions will inevitably be neglected. Certainly, preparation for high school teaching is not adequately encompassed by adding one or two years to a curriculum that is planned primarily for elementary school teaching, nor is it clear that the best preparation for elementary teaching is that which, with one or two added years, will be the best preparation for high school teaching. Admirably adapted tho the plan may be to promote the interests of certain individuals, it seems indefensible from the standpoint of the welfare and progress of the public school service.

This general tendency of the Missouri curricula to emphasize the needs of the individual student at the expense of the service appears clearly upon a more minute analysis of the arrangement of courses and the content of the various units of study that comprise the several curricula. For convenience, this analysis will deal first with the secondary curriculum and then with the four curricula of collegiate grade.

b. SECONDARY CURRICULUM LEADING TO THE RURAL CERTIFICATE

Each of the state normal schools of Missouri offers at least one secondary curriculum of a professional character. This "Rural Certificate Course," which in its main features is now common to the five schools, requires the completion of sixteen units of secondary work. It was agreed upon at a conference of the normal school presidents and the state superintendent of public instruction in June, 1916, and its provisions went into effect on January 1, 1917. A curriculum calling for at least two years of professional work above the elementary school had been offered since 1910. At most of the schools this had gradually been extended to three years, or twelve secondary units. The increase of the requirement to sixteen units is consequently to be looked upon as a forward step. The new sixteen-unit curriculum was made practically identical with the curriculum for the high school teacher-training classes which had been established and subsidized in 1913. Its essential features are as follows:¹

"1. The following academic subjects will be required: English, three units. Mathematics, two units (including arithmetic, algebra, and geometry). Agriculture, one unit. High School Science, one unit (including biology, physics or physical geography). History, two units (one of which must be American history and government). Industrial and Fine Arts, one unit.

"2. The following professional studies will be required:

"(*a*) Subject-matter of the common branches, with emphasis upon method, one unit.

"(*b*) The psychology of learning, or elementary psychology, one-third unit; rural school problems,² one-third unit; school management,² one-third unit (in all one unit).

"(*c*) Methods and observation, one unit.

¹ *State Report*, 1916, page 342.

² The names of these courses do not agree with the uniform terminology adopted by the Conference. See page 173.

"3. In addition, three electives, among which farm accounts, bookkeeping, shorthand and typewriting, geography of commerce, general science, chemistry, domestic science, domestic art, music, and physical education are recommended.

"4. It is recommended that students be required to complete eight units of high school credit before taking any of the professional work."¹

CONTRADICTORY AIMS

A teacher-training curriculum covering four years of secondary work may be constructed upon one or another of three plans: (1) it may be professionalized from the outset; (2) it may preserve the essential features of the general high school curriculum for two or three years, reserving the third and fourth years or the fourth year alone for concentrated professional work; (3) it may be essentially a general curriculum throughout, introducing "reviews" and other professional courses wherever convenient. At first glance, the above curriculum seems to follow the first plan, but one is immediately led to ask why, if the curriculum is specifically for the preparation of rural school teachers, such subjects as bookkeeping, shorthand, and typewriting should be recommended as electives, with the possibility of giving them almost as much time as is recommended for all of the professional work; or why physical training is elective rather than prescribed; or why physiology and hygiene are neither elective nor prescribed.

One gains the impression that these proposals do not reflect solely the needs of a curriculum for the preparation of teachers. Such a curriculum, if offered on the secondary level, should certainly include liberal as well as professional courses; there should be room for the algebra, the geometry, the unit of history over and above American history, and the unit of science other than agriculture — altho with both history and science, definite prescriptions would seem preferable to mere quantitative provisions. But to combine in one curriculum two distinct groups of vocational elements is disconcerting. By no stretch of the imagination can bookkeeping, shorthand, and typewriting be thought of as closely related to rural school teaching, nor do these subjects possess the liberalizing and broadening values that would otherwise justify their inclusion.

Trivial as it may seem, a situation of this sort is significant in the illustration that it affords not only of the still markedly unprofessional character of rural school teach-

¹ There are some interesting variations among the five schools in the way in which the conference suggestions for the rural certificate curriculum are administered. Warrensburg offers only 2½ units of electives, but otherwise provides a curriculum corresponding closely to the proposals above discussed. Cape Girardeau recommends 3 units of history instead of 2, and 2 units of industrial and fine arts instead of 1; the recommended curriculum at Cape Girardeau, therefore, calls for the completion of 18 rather than 16 units. Springfield reduces the electives to 1½ units; requires 3½ units of English, instead of 3; 2½ units of history, instead of 2; and 1½ units of geography and 1 unit of physiology and physics. The Springfield catalogue declares that the tabular statement of the curriculum "meets all of the requirements set up by the state superintendent and is what we think is the best possible preparation for teaching in rural schools that can be made in a four years' high school course. . . ." Maryville offers no free electives, adds ½ unit to the recommended requirements in English, history, and the fine and industrial arts, and triples the requirements in science. (Data and quotations given will be found in the respective catalogues for 1917 with the exception of Maryville, for which the catalogue of 1916 was used, no later catalogue having been published at that school.)

ing, but again of the tendency of the normal school to protect the individual from attempting to make a career in a field that offers no career. In effect it says to the student: "Rural school teaching is a thankless job; yet it may be made a stepping-stone to something else. We advise you, while preparing for it, to learn stenography and typewriting in case something better should turn up in these fields."

SECONDARY PROFESSIONAL CURRICULA SHOULD BE ABOLISHED

The present rural certificate curriculum, then, altho it constitutes in many respects a distinct advance over its predecessors, is essentially a "compromise measure," as all attempts to construct a professional curriculum upon a purely secondary basis are likely to be; compromises as between the claims of general and vocational courses, or compromises among various types of vocational opportunity. As set forth elsewhere,¹ there should soon be no place for professional study on the secondary level, and no need for making a choice of a profession before the high school course has been completed. The level of rural school teaching can and should be raised to the point where certification will not be granted for this work unless the candidate has had some professional training beyond the high school. But the normal schools should not wait for this advance in the standards of certification before they abandon their secondary professional courses. They have made a notable step forward in placing the rural certificate curriculum upon a four-year basis, and in recommending that no professional courses in this curriculum be taken before the third year, thus providing for the professional studies a background of at least eight units of general secondary preparation. It would be advisable immediately to require twelve units of secondary work as a basis for these studies, thus concentrating all of the professional work in the fourth year and giving this year exclusively to the professional work. Then at a definitely stated time,—say 1923,—the professional courses could be advanced still another year, placing them upon a fully collegiate basis. Another advance should make two years of professional work beyond the high school an irreducible minimum of preparation for the serious responsibilities of rural school teaching, and ultimately, when far better salaries can be paid to elementary teachers, all curricula should be extended to four years.

C. COLLEGIATE CURRICULA OF THE NORMAL SCHOOLS

It will be recalled that the four collegiate curricula of the state normal schools constitute an educational ladder in that each curriculum prepares for its successor while at the same time it provides professional training and recognition in the form of a certificate which may enable the student to teach until he has saved enough money to go on with his normal school work. The necessities that this general policy imposes on the school in the detailed organization of its collegiate curricula are clearly apparent in the paucity of prescriptions and the abundance of elective privi-

¹ See pages 128 ff.

leges, even in the curricula that cover only one or two years. The tabular summary which follows suggests the lengths to which this scheme of elections is carried, as well as the variations among the several schools; the data are summarized from the catalogues of 1917 (announcements for 1917-18), except in the case of Maryville, where the catalogue for 1916 was used.

	<i>Kirksville</i> <i>Hours</i>	<i>Warrensburg</i> <i>Hours</i>	<i>Cape Girardeau</i> <i>Hours</i>	<i>Springfield</i> <i>Hours</i>	<i>Maryville</i> <i>Hours</i>
<i>30-Hour Curricula</i>					
Specified Courses	10	10	18	10	20
Restricted Elections ¹	10 ²	—	9 ³	20	10 ⁴
Free Elections	10	20 ⁵	3	—	—
<i>60-Hour Curricula</i>					
Specified Courses	15	20	24	32½ ⁷	40
Restricted Elections ¹	37½	17½	24	25	—
Free Elections	7½	22½ ⁶	12	2½ ⁷	20
<i>90-Hour Curricula</i>					
Specified Courses	17½	25	26	42½ ⁷	8
Restricted Elections ¹	42½	47½	52	45	—
Free Elections	30	17½	12	2½ ⁷	—
<i>120-Hour Curricula</i>					
Specified Courses	17½	25	34	42½ ⁷	45
Restricted Elections ¹	47½	42½	78	75	60
Free Elections	55	52½	8	2½ ⁷	15

NOT TRUE CURRICULA

It is clear that the groupings of studies in all of the schools except Springfield are not curricula in the true sense of the term; they are rather large program patterns from which individual curricula may be constructed. This plan of organization again expresses the tendency of the normal schools to consider first the desires of the individual student rather than the needs of the service. It is, of course, conceivable that there is no inconsistency between these two considerations and that a plan which aims primarily to do the "best for the individual" will also be of the largest value to the service. In order to determine whether this position is justified, it is necessary to examine some of the individual curricula that are actually constructed by students from the materials provided by such programs.⁹ Ten illustrative programs are reproduced

¹ Including options and systems of majors and minors.

² Five hours elective in group of subjects requiring no preparation outside of class; five hours in education.

³ Choice of six semester hours of science.

⁴ Electives must include stated courses in music, physical education, drawing, penmanship, and manual arts.

⁵ Not more than five hours in technical subjects; two and one-half hours in agriculture if it has not been taken in high school.

⁶ Not more than ten hours in technical subjects.

⁷ Two and one-half hours listed as freely elective for upper grade and rural teachers are specified for primary and lower grade teachers.

⁸ No 90-hour curriculum is listed in the catalogue.

⁹ The actual curricula of individual students collected in the course of the present study represent a period prior to the adoption of the plan that has been outlined above, but the plan in operation in some of the normal schools for ten years prior to 1915 was substantially identical with the present plan in so far as the relative proportions of

in the Appendix.¹ They are fairly typical of the way in which the elective system has actually worked in practice in three of the normal schools.

EXISTING "CURRICULA" NOT PROFESSIONAL

The lack of coherence and interrelationship of courses in these illustrative programs is not their chief defect. Only in an incidental or casual sense could they be called professional programs. In almost every case the selection of courses has been determined apparently without the slightest regard to what the clearly predictable needs of the teaching situation will be. Under this policy, it is impossible to speak of a "professional curriculum," for what results is merely a miscellany of general studies, put together in a haphazard fashion, with a few courses in educational theory and practice introduced where they will most conveniently "fit in."

This detachment of the so-called "professional" work, indeed, constitutes a striking weakness in efforts to provide professional preparation for teachers, not only in the Missouri normal schools, but in the colleges and universities and in nearly all normal schools that are organized on the collegiate model. The notion that an adequate professional curriculum for teachers can be formed by adding a requirement in "education" to a "general college course" is thoroughly fallacious; and when only group requirements are made, permitting students to choose practically any courses that they please, provided only that such courses appear under the name "education," it is a travesty to speak of "professional preparation." The Missouri normal schools, happily, have not gone so far as this, but the options that some of the schools permitted in respect to certain educational courses at the time when the study was begun showed a clear tendency to extend the loose elective principle even to the strictly professional work.² This tendency has, in part, been corrected since 1915.

prescribed and elective courses are concerned; hence individual curricula made up during these years may legitimately serve to illustrate the tendencies of the general policy. It should be added, however, that all of the schools have shown a tendency since 1915 to reduce the free electives in some measure, to increase the restricted electives, and, less noticeably, to increase the prescribed studies. Springfield, indeed, has moved significantly toward a system of differentiated curricula, each made up largely of prescribed courses.

¹ See page 411.

² Two examples from the catalogues for 1916 may serve to illustrate this tendency:

At Kirksville only ten hours of "strictly professional" work were actually prescribed for the sixty-hour diploma: these hours were distributed as follows: two and one-half in psychology, two and one-half in history of education, and five in practice teaching. In addition, five semester hours were to be chosen from four two and one-half hour courses: principles of teaching, school economy (school management), rural sociology, and the school curriculum.

The principle justifying the options is not obvious. The courses in principles of teaching and school economy are really complementary courses, the one dealing with the technique of instruction, the other with the details of administration in so far as these are matters of concern for the classroom teacher. The normal school student needs both of these courses. Again, rural sociology should certainly be a requirement in all curricula looking toward rural school teaching, but it is in no sense equivalent either to the course in the technique of teaching or to the course in management. The work offered in the course entitled "The school curriculum," as outlined in the catalogue, is far too extensive to permit of adequate treatment in the time allotted to it, and even if the course were abbreviated in content or expanded in time, it could scarcely serve as a substitute for the courses in technique.

At Cape Girardeau, the actual prescriptions in professional subjects for the sixty-hour diploma involved approximately fifteen semester hours of work, including four hours of psychology, two hours of principles of teaching, six hours of practice teaching, and two hours of experimental pedagogy. But choices were to be made among additional professional courses until a total of approximately twenty-five hours had been completed. These choices were between educational psychology and experimental child study, or between the history of education and experimental child study. Again the justification of these particular options is not clear. There are no two groups of teachers, one of which needs a knowledge of experimental child study to the exclusion of educational psychology, and the

d. CURRICULA OF THE CITY TRAINING SCHOOLS

In striking contrast with the curriculum policy of the state normal schools of Missouri is that of the city training schools. The latter, it should be remembered, are institutions of collegiate grade only; that is, their enrolment is limited to high school graduates. Each offers two-year curricula that are comparable in point of entrance and residence requirements to the sixty-hour curricula of the state normal schools. But the resemblance ends here. The training-school curricula are prescribed from the outset, and they emphasize the intensive study of the subjects that the students will later be called upon to teach. The sharp differences between these truly professional curricula and the programs of the normal schools may be seen by contrasting the individual programs above referred to with the following summary of one of the curricula required in the Harris Teachers College; another curriculum from St. Louis and one from the Kansas City Training School will be found in the Appendix.¹

THE HARRIS TEACHERS COLLEGE CURRICULUM FOR ELEMENTARY TEACHERS.²

First semester: Arithmetic (5);³ Science (2); Geography (4); Hygiene (1); Drawing (4); Primary method (2); Gymnasium (2); Music (2); Penmanship (2); English (2). Prepared work, 16; unprepared work, 10. Total, 26.

Second semester: Psychology (5); Science (3); United States history and civics (4); English (3); Drawing (2); Reading (1); Gymnasium (2); Primary (2); Penmanship (1); Music (1); Grammar-grade observation (2). Prepared work, 18; unprepared work, 8. Total, 26.

Third semester: Apprentice work (full time).

Fourth semester: Theory of education and school management (5); Child psychology (3); English (4); History of education (1); Educational sociology (3); Drawing (2); Music (2); Penmanship (1); Gymnasium (1); Geography ($\frac{1}{2}$); History and civics ($\frac{1}{2}$); Arithmetic ($\frac{1}{2}$); Drawing ($\frac{1}{2}$); Music ($\frac{1}{4}$); Gymnasium ($\frac{1}{4}$). Total, 24 $\frac{1}{2}$.

CONTRAST BETWEEN STATE NORMAL SCHOOLS AND CITY TRAINING SCHOOLS

Why do these two types of institution—the state normal schools and the city training schools—reveal such striking contrasts? In both cases the typical entering student is a high school graduate, looking forward to two years of professional preparation for the work of teaching, and in so far as these two-year students are concerned, both types of schools are supposed to be fitting their students for the same kind of work—service in graded elementary schools. Yet we find the means of effecting this preparation radically different. In so far as the efficiency of the preparation is con-

other, educational psychology to the exclusion of experimental child study; nor are there two groups the needs of which as between the history of education and experimental child study are strikingly differentiated.

¹ See pages 417, 418.

² *Report of the St. Louis Board of Education for 1908-09*, pages 53, 54. Relatively slight changes appear in a mimeographed syllabus used in the college at the time the present study was made. These are included in the above summary.

³ Figures indicate semester hours.

cerned, there can be no reasonable doubt that the city training schools, by concentrating upon a single objective, turn out a better product. They are enabled thus to concentrate their energies because elementary school teaching in the large cities offers rewards which, inadequate tho they may be from many points of view, are still sufficiently attractive to impel high school graduates to look upon the service as a relatively permanent occupation. Outside of the larger cities, however, this is not so frequently the case. High school teaching is much more attractive and significantly better paid; furthermore, it is far easier of access than in the large cities. Men particularly will not be contented with elementary service, and when they undertake normal school work they are not often thinking of teaching in the elementary school or, permanently, even in a high school. As has been suggested, the normal schools have recognized this situation, and have adapted their courses of study and their requirements for graduation to meet the wishes of the individual rather than the needs of the schools.

NORMAL SCHOOLS HAVE BELITTLED ELEMENTARY INSTRUCTION

This is entirely apart from the question as to whether the normal schools should aim to prepare teachers for the high schools. Under the present organization of their curricula, they are deliberately encouraging the student to make elementary teaching, whether in rural schools or in graded schools, a stepping-stone to high school teaching, to the teaching and supervision of special subjects, and to school administration; and this rather than any ambition that they may or may not cherish to be recognized as competent to prepare high school teachers, or to become "colleges," constitutes the most serious charge against them. It is not only possible but quite beyond question that certain normal schools may profitably undertake the preparation of certain types of high school teachers, and a normal school which offers courses of collegiate grade administered consistently with recognized standards should certainly rank with other collegiate institutions. But this does not warrant the normal school in discrediting elementary service in the emphasis of its courses, while it glorifies that service with unction in public discussion. Nor does it justify it in surrendering its prerogatives as a professional school. The strength of any professional school lies in the fact that it can aim at a definite objective. The weakness of professional adjuncts to institutions of general or liberal education lies in the fact that the great bulk of the work cannot be coördinated and integrated with reference to a definite goal. The normal schools of Missouri seem quite deliberately to have chosen the weapons of weakness rather than the weapons of strength. They have adopted the loose program of studies in preference to the compact, unified organization of real curricula. They have professionalized their work only by the introduction of detached courses in educational theory, — comparable in every way to the makeshift requirements in education thru which the liberal-arts colleges have sought to justify their claims to recognition as teacher-training agencies; and no more than these arts colleges have they attempted to professionalize all of their courses, making each bear with its full force

upon the central problem of teaching. The normal schools of this type have been followers rather than leaders. They have vehemently asserted their "rights," but they have failed to justify their independent existence by adapting themselves throughout to their peculiar task. They have been imitators, and imitators of something that is weak rather than of something that is strong.

The city training schools, on the other hand, have escaped these pitfalls, perhaps in large measure because they have been under no appreciable pressure to build up large enrolments, and consequently have not been tempted to lose sight of the service in efforts to meet individual needs and thereby attract students. The service itself, too, has been much closer to the city training schools than to the normal schools; they are themselves part and parcel of it; and any shortcomings in their methods or courses are likely to be disclosed quickly and effectively. With less temptation to scatter their energies, with a constant check upon their work, and under the stimulus of a direct responsibility for doing one thing well, they have been impelled to focus their efforts upon a central problem. Where they have been well supported and well staffed, as in St. Louis, their superiority to the collegiate type of state normal school cannot be successfully disputed.

THE CITY TRAINING SCHOOLS MISS THEIR FULL OPPORTUNITY

This is far from saying, however, that the training schools are without their weaknesses, or that their curricula, while unquestionably better adapted to their purpose than are the inchoate programs of the normal schools, are as satisfactory as might reasonably be expected. If the normal schools have chafed under the low public estimate accorded to elementary teaching, and have expressed their irritation by effectually pointing their students away from the lower schools, the city training schools have perhaps been too ready to accept the subordinate position of the service for which they prepare. They have adopted a professional attitude in the construction of their curricula, but they have not fully professionalized their policies. Not only in St. Louis and Kansas City, but in most of the city training schools of the country, a single, undifferentiated two-year curriculum is deemed sufficient to equip the student with the great variety of skills and insights involved in efficient teaching during all of the first eight school years. This single curriculum, it is true, usually reflects the actual materials of the elementary program, and this is most commendable; but the time is so short and the field is so wide that these materials cannot be covered in a thorough-going way, and with the ramifications and extensions that are essential if the courses are to meet the standards suggested in the earlier sections of the present report. There are many, especially among the workers in the state schools, who oppose the type of curriculum required in St. Louis on the theory that the work of the teacher will ultimately be much more efficient if the training curriculum includes some courses of a more advanced and more distinctly "academic" or "general" character. This criticism is justified if the courses required in the training school are merely or mainly

“review” courses; but the criticism loses its point when such courses, while dealing with elementary subjects, treat those subjects broadly and deeply. This cannot be done successfully in a two-year curriculum that covers the entire field of elementary teaching. The attempt to do so is as successful in St. Louis as the circumstances permit, but a longer curriculum or differentiated curricula, or both, are necessary to attain the best results.

If, then, the normal schools of the collegiate type have tended to make elementary teaching a stage preparatory to high school teaching, and have consequently accentuated the unfortunate distinctions of the teaching service, it can be said with equal truth that the training schools with their narrower field, with every chance to professionalize and dignify all grades and levels of elementary instruction, have fallen short of their opportunities. After all, whatever may be the excuses for the failure of the normal schools to raise appropriately the character and status of elementary teaching, the excuses for the failure of the training school to do this are less convincing. There are few large cities to-day that could not successfully demand a three-year training-school curriculum from the graduates of their local high schools who wish to become elementary teachers. The training school knows full well the difficulty of preparing teachers in a shorter time, and it should take the initiative and exercise the leadership in bringing about this extension of the training period. For the same reason the city training school should be the first to adopt a policy of differentiated curricula that will ensure a fair mastery of a restricted field as a basis for an expanding training in elementary instruction. Neither the normal schools nor the city training schools can come into their own until they stand firm, not upon their right to rank with colleges (a right which they should take for granted), but rather upon the right of the elementary teaching service to rank with other types of teaching service, and, what is much more fundamental, upon the right of every child at every level of his instruction to have a teacher especially trained to meet the peculiar problems of that particular period.

2. Organization and Content of Specific Courses

The preceding section dealt with the organization of curricula as wholes. We have now to consider the specific courses that make up these large units. The emphasis will be primarily upon the so-called “professional” courses, inasmuch as it is thru these at the present time that the professional purpose of the teacher-training institutions is chiefly expressed. The principal courses will be analyzed with the aim of determining what function each is intended to discharge under the theories now apparently governing curriculum organization in the Missouri schools. An attempt will then be made to evaluate this purpose or function in the light of the principles or standards laid down in the preceding discussions.

a. PROFESSIONAL COURSES OF SECONDARY GRADE

The professional courses recommended by the conference of 1916¹ for the rural certificate curriculum are the following:

- (1) Subject-matter of the common school branches with emphasis upon method, one unit (or one-fourth of a full year's work).
- (2) Psychology of learning or elementary psychology, one-third of a unit (or one-twelfth of a full year's work).
- (3) Rural life problems, one-third of a unit.
- (4) Rural school management, one-third of a unit.
- (5) Methods and observation, one unit.

According to the conference agreement, no one of these courses is to be elected until at least eight units (two years) of secondary work have been completed. The proposals, therefore, contemplate three units, or three-fourths of a year, of professional study distributed over the last two years of the secondary curriculum. The advantages of concentrating this work in the fourth year and later of amplifying it and transferring it to a fifth graduate year have been pointed out in the preceding section.² We are concerned here only with the purpose and content of these professional courses, and with their pertinence to the preparation of teachers for the rural schools.

(1) SUBJECT-MATTER OF THE COMMON SCHOOL BRANCHES WITH EMPHASIS UPON METHOD

The conference did well to place this course first in the list, thereby implying that it will be the first professional work that the pupil undertakes. The time allowed for it—five periods a week for a year—is too brief, but it is as long as a professional curriculum on the secondary level can well afford. Then, too, certain phases of elementary subject-matter are represented in the general high school courses, especially the courses in English and in American history and civics, which are recommended as a basis for the professional work. “Methods and observation” covers the same ground also from a somewhat different point of view.

In the high school training-classes, the course in elementary subject-matter is taught by the training teacher, and consequently is treated as a unit course, with a tendency, no doubt, to distribute the time and emphasis over the various topics as the needs of the class may demand. In the normal schools the work is covered in separate courses, each extending over a period of twelve weeks, and each limited to a single subject, as arithmetic, grammar, or geography. While the training-class student will have instruction in all of the important subjects of the elementary program, the normal school student will have instruction in only three subjects at most.

CONCENTRATION AND UNIFORM TREATMENT NEEDED

The normal schools vary considerably in their offerings and requirements. In general, the chief emphasis is upon the relatively advanced phases of the subject-mat-

¹ The conference of heads of Missouri training institutions described on pages 62 and 164.

² See page 166.

ter—those phases that are most clearly represented in the seventh grade and eighth grade programs. Where the work in elementary subject-matter is parceled out among the various academic departments, this emphasis upon upper grade topics is probably inevitable. It is well to ask whether in the normal schools as in the high school training classes, the year's work in elementary subject-matter and methods might not well be assigned to one teacher—a person who is familiar not only with the subject-matter but with the means of adapting it especially to the primary and intermediate grade pupils who, in the large majority of cases, will form the chief problems of the rural school teacher. This policy of making the work a unit in charge of a single teacher constitutes one of the marked advantages of the teacher-training classes and one of the important elements of their strength. It might even be advisable so to organize the course that twelve weeks will be given to primary materials and methods, twelve weeks to intermediate grade materials and methods, and twelve weeks to upper grade materials and methods; or if not this equal division, at least an organization of materials that explicitly recognizes these three divisions of school life.

(2) THE PSYCHOLOGY OF LEARNING

According to the recommendations of the conference, a full unit is devoted to what might be called simple educational theory. The first twelve weeks of this work are given to an elementary course in educational psychology. Essentially the same course was given in some of the normal schools prior to the conference agreement. The outlines submitted by the instructors indicate that the time is distributed among the various topics substantially as follows: two weeks are spent in the study of consciousness and its relation to instinctive and acquired modes of behavior; a half-week to the structure of the nervous system; four or five weeks to habits, sensations and perceptions, imagination, memory, and association; one or two weeks to attention and the emotions; and about two weeks to economy in learning and a brief discussion of the higher thought-processes. The educational applications of each of these topics are naturally given a strong emphasis.

It is obvious that a course of this sort for high school pupils, limited to twelve weeks, can at best touch the problems of mental growth but superficially. There is, however, a distinct need for a brief course introducing the student to the concrete problems of teaching and giving him some familiarity with the simpler principles of educational psychology. It is doubtful whether the course should be known as "psychology," for the tendency under such a designation is toward a detached and formal treatment. The term "Introduction to Teaching" suggests more clearly both the purpose of the course and its close correlation with actual schoolroom practice.

(3) RURAL LIFE PROBLEMS

Prior to the conference agreement, most of the normal schools offered two types of courses dealing with specific rural school problems: (a) rural school methods courses

that usually attempted to cover in twelve weeks not only rural school management but also the methods of teaching all of the elementary school subjects,—an obviously impossible procedure;¹ and (b) courses in “rural life,” that were concerned largely with the broader sociological problems of rural school teaching. With the adoption of the unit of “subject-matter and methods” and the unit of “observation and methods,” the superficial twelve-weeks courses were abandoned, and the older “rural life” courses became the course in “rural life problems.” This was an improvement.

The courses in rural life problems as now offered in the normal schools still vary in scope and content,² but in general, their development during the past three or four years is a hopeful sign that the pressing problems of rural education are to receive adequate attention in the normal schools. When the preparation of the rural school teacher and the rewards for rural school teaching are placed upon the same basis as the preparation and rewards for teaching in town and city schools, there will be no dearth of materials for constructing a rich and fruitful curriculum of studies dealing primarily with the fundamental problems of rural life and education.

(4) RURAL SCHOOL MANAGEMENT

Another forward step which followed the conference agreement was the development of specialized courses in rural school management. Earlier courses in this field were not clearly differentiated in most cases from the courses in rural life problems,³ and prospective rural school teachers in many instances gained their knowledge of the precepts and principles of management in the collegiate classes which dealt primarily with graded school problems. At the present time (1917), each of the schools offers a separate course in the management of rural schools. It deals with the problems that have come to be associated with collegiate courses in school management,—classification of pupils, construction of the daily program, initiation and maintenance of

¹ One of the courses found in the spring of 1915, for example, gave three weeks to reading, two weeks to language and grammar, and one week to each of the following subjects: spelling, arithmetic, geography, history and civics, and agriculture. Another distributed the time of nine weeks among the following topics: child study, observation, applying standards of criticism, teaching of English in rural schools, teaching of history and geography in rural schools, and teaching of arithmetic in rural schools,—each of these topics occupying from one week to two and one-half weeks. The class taking the latter course represented every stage of educational advancement from the first high school year to the fourth college year. The enrolment as reported by the instructor included not only prospective rural school teachers, but prospective teachers of high school English and high school history. A third course was reported by the instructor as including a treatment of “all school subjects: English including reading, spelling, penmanship, arithmetic, elementary science, history, geography, drawing and construction, music.” This course covered twelve weeks!

² At Warrensburg, the work is apparently divided between two twelve-weeks courses; one (Rural School Methods) deals with the teaching of the elementary school subjects in such a way that the primary and intermediate grade problems receive the chief emphasis; the other is a more general course dealing with personal and public hygiene, play and recreation, vocational education, boys' and girls' club work, and the organization of the community for social and economic purposes. At Kirksville, the requirements recommended by the conference are met by a twelve-weeks course which treats of the changes that have been and are now taking place in rural life, the effect of these changes upon the rural school, and the redirection and reorganization of rural education. The course at Springfield closely resembles that offered at Kirksville. At Cape Girardeau, the course is somewhat more specifically concerned with the operation of a rural school, emphasizing such problems as the school plant, consolidation, the school as a community centre, and the teacher as a community leader.

³ A course offered in 1915, for example, dealt with such topics as the tenant system in Missouri, the district as an administrative unit, the condition of the country church in Missouri, and school laws regarding county and state funds.

routine, marking and grading, school attendance, and discipline,—but the treatment is guided by the fact that the student is preparing for work in one-room schools. The modification is fundamental, for a one-room school presents problems quite different from those of the graded school. Not only is the preparation of the rural school teacher made more effective by this procedure, but the collegiate courses, relieved of the presence of secondary pupils, can also be more closely concentrated upon the graded school problem.

(5) METHODS AND OBSERVATION

A marked disadvantage of the rural certificate curriculum lies in the fact that it makes no provision for practice teaching. The nearest approach to actual contact with the teaching situation is represented by the course in observation. The descriptions of this course that appear in the several catalogues arouse suspicion that the work is largely theoretical and consequently subject to the tendency of such courses to become either detached and abstract or purely perfunctory. Only one of the schools (Kirksville) has a model rural school that can be used for observation. As the training-school facilities in all of the normal schools are so meagre that all or most of the teaching is in the hands of practice teachers, one may infer that whatever observation is required in the secondary courses is likely to be the observation of practice teachers.

As long as a rural certificate curriculum is offered upon the secondary level, every possible step should be taken to make it as effective as possible. This cannot be done without providing in some way for practice teaching, and the requirement of a full unit for "observation and methods" should certainly include participation and practice teaching as well as observation. To give time for these activities, some of the materials dealing systematically with "methods" could be included in the "subject-matter and methods" course discussed above. In any case, an appreciable amount of participation and practice teaching should be provided.

SUCCESSFUL PROCEDURE IN MINNESOTA

The plan that has been developed in the high school training-classes of Minnesota suggests a standard that other secondary systems of teacher-training, whether in high schools or normal schools, might well seek to attain. According to this plan, one period each day, practically for the entire year, is spent by the training-class student in the elementary school. At the beginning of the year two weeks are given to close observation. Then each student takes a group of about five pupils for fifteen minutes each day, the teaching being limited at the outset to very simple exercises, preferably of the "drill" type. After two weeks of this work, the training-class spends a week in visiting and observing neighboring rural schools, and the following week is devoted to a discussion of these visits. With this preparation the more intensive teaching of small groups in the local graded schools is begun and continued for three months. Following this, two months are spent in teaching larger groups, and then

two weeks in actual rural school teaching. For the specific purpose of providing the students with experience in beginning first grade work, small classes are organized toward the end of the year comprising children in the community who would normally enter school the subsequent fall. Students take charge of the classes under close supervision and work with them for eight weeks.

A plan of this sort demands, of course, an abundance of "laboratory" material, and would be quite impracticable in normal schools so limited in this respect as are those of Missouri. The high school training-classes, with their relatively small enrolments and their abundance of local practice materials, are much more favorably situated in this respect. A normal school suitably located with a number of the schools of a town or city under its control could readily make similar arrangements. In any case, the normal school, wherever located, if it undertakes the preparation of rural school teachers, should make satisfactory provisions for a period of both observation and practice in neighboring rural schools.

b. PROFESSIONAL COURSES OF COLLEGIATE GRADE¹

The distinction between secondary and collegiate courses in the professional study of education has been less a difference in the names and materials used than the often more important difference in the intellectual experience and preparedness of the student. The same is true of other subjects, such as literature, history, economics, and sociology; the materials to be presented bear the same name whether offered upon the secondary or the collegiate level. This is perhaps one reason why the Missouri normal schools have failed, until recently, to limit registration in professional courses of collegiate grade to students of collegiate standing, and have thus produced courses of neutral hue that were neither collegiate nor secondary. In the spring of 1915, twenty-three out of fifty-one collegiate classes in strictly professional subjects reported a mixed enrolment representing both college students and high school pupils. The practice was defended on the ground that the secondary pupils admitted to these courses were almost always mature men and women who had had some experience in teaching. As a matter of fact, however, twenty-eight per cent of the secondary pupils enrolled in these classes were below the age of twenty, the proportion of immature students in the mixed classes being six per cent higher than in the classes that were limited to *bona fide* college students. Wide variations in maturity tend to accompany wide variations in training, and there can be no doubt that both the organization of material and the work of a class, the members of which vary widely as to training and maturity, will suffer in comparison with that of a homogeneous group.² It is gratifying to note that the Missouri normal schools have since adopted a consistent policy of

¹ Conspectus of the professional courses offered in the five schools during the year 1916-17 will be found in the Appendix, pages 406-411.

² The range of ages was wide in both groups of classes, but considerably wider in the mixed classes than in the classes limited to college students; the average age-range of the former group was nearly nineteen years as contrasted with fifteen years, the average age-range of the latter group.

differentiating collegiate work from secondary work at every point. With this policy established, it will be much easier to enforce prerequisites and to raise the standards of professional courses.

INTER-SCHOOL VARIATIONS

The variations in the amount and character of the professional work actually required in the several schools are interesting in the light that they throw upon the general theory under which the curricula are organized and administered. Of strictly professional courses of collegiate grade, five may be recognized as constituting a fairly well standardized equipment for the prospective teacher: (1) psychology; (2) the history of education; (3) general method or principles of teaching; (4) school management, sometimes designated as "school economy" or as "school administration;" and (5) observation, participation, and practice teaching. Not all of these subjects are required by each of the normal schools, but two or more of them are among the requirements of every collegiate curriculum.¹ Psychology, general method or principles of teaching, and practice teaching are required by all of the schools for the sixty-hour, or two-year, curriculum. At Kirksville, Warrensburg, and Springfield, two and one-half semester hours of psychology are demanded; at Maryville, this amount is doubled; while at Cape Girardeau, four semester hours are deemed sufficient, altho two semester hours of child study have recently been added to the prescribed studies. In practice teaching the requirement of five semester hours or the equivalent is uniform among the five schools. A course in the history of education and a course in school management are required in four of the schools. These are commonly offered for two and one-half semester hours.

(1) PSYCHOLOGY

INTRODUCTORY COURSE

The introductory course in psychology in the Missouri normal schools is "general" in its character; that is, it attempts to give the student a systematic account of the science as it has been developed by the pure psychologist. In this respect it differs from the secondary course referred to in the preceding section.² The latter, it will be remembered, is usually designated as "educational psychology," and lays its strongest emphases upon the topics that are most closely related to the art of teaching. The general and systematic character of the collegiate course is shown both in the textbooks that are employed and in the outlines of courses furnished by the instructors in charge of classes.³

¹ With the exception of the general college curriculum at Cape Girardeau, which may be completed without any professional courses whatsoever.

² See page 174.

³ It was also fully substantiated by what was seen in the classes visited during the spring of 1915. In one of these classes, the first part of the hour was spent in discussing the anatomy of the retina, and the remaining time was given to the phenomena of color-mixing, both topics that could profitably be dismissed with a brief reference and

The course is apparently conceived by most of the normal school teachers of the subject as furnishing the student with an introduction to psychological study for its own sake, rather than as a "practical" course dealing with facts and principles directly applicable to the problems of teaching, or as an "orienting" course furnishing an initial view of the problems of teaching and learning. The course follows the college model with fair fidelity.

ADVANCED COURSES IN PSYCHOLOGY

In making the introductory course in psychology "general" in its scope and character, the normal schools have not been unmindful of the applied phases of the subject. In most of the schools advanced courses are offered, and these almost always deal with pedagogical applications. In the state schools, however, with two exceptions, this advanced work is either elective or alternative in so far as the two-year curricula are concerned; and consequently it is not generally undertaken by a considerable proportion of the students.¹ The two exceptions are Springfield and Cape Girardeau, both of which require a course in child study in the two-year curricula.

As with many of the other "professional" subjects, the value of psychology in the preparation of teachers has been seriously questioned. This skepticism has been due in part, at least, to the formal and general character of the courses that are usually required. The systematic study of psychology as a "pure" science undoubtedly has a place in some certain normal school curricula. Its function, however, is not primarily that of a propaedeutic to the detailed study of the teaching process. It certainly does not constitute a body of theory that may be passed on to the beginning student in the hope that he will be able to deduce from its principles and postulates the rules and precepts of successful practice.

TEACHING LESS AN APPLIED SCIENCE THAN A FINE ART

The traditional organization of teacher-training curricula seems to rest upon the assumption that teaching is, or at least may ultimately become, an applied science, analogous in every essential respect to medicine, engineering, and agriculture; and, consequently, that adequate preparation for teaching is first to lay down the general principles and then to apply them to the concrete teaching situation. This assumption would make the study of psychology in the normal school analogous to the study

might even be entirely dispensed with in an introductory normal school course. Another class spent the hour in discussing the definitions of psychology proposed by Ladd and Stout; the assignment for the following day involved the problem—"How does psychological analysis differ from physical analysis?" The instructor was skilful in directing the discussion of the rather immature students thru these highly theoretical topics, but it seemed hardly a profitable use of one out of only sixty recitation periods given to the entire course. A third class was dealing in an abstract way with the practical problem of training memory. The attention was well sustained, however, and the hour's work no doubt yielded a profit. The discussion gradually led to the statement of two problems which formed the assignment for the following day: "What constitutes a 'natural relationship'?" and "Are logical relationships natural relationships?"

¹ For example, in the spring of 1915, in Kirksville, there were 27 students in one of the two sections in general psychology as against 12 students in the only other psychological course offered to students of collegiate grade.

of physiology in the medical school, the study of theoretical mechanics in the engineering school, and the study of chemistry in the agricultural school.

There is, of course, something of this applied science character in teaching, but fundamentally teaching is much more closely allied to the fine arts than to the applied sciences. Just as many gifted painters have been ignorant of the science of optics; just as many good musicians have an adequate knowledge neither of the physics of music nor of the psychology of tone; just as many effective writers and speakers would be unable to formulate the principles of style; so good teachers have taught well in the past, and will doubtless teach well in the future, altho quite unconscious of the principles that lie back of their art. The painter, the musician, the writer, and the teacher might very likely do their work much better if they possessed this knowledge of theory; but something other than an understanding of theory is assuredly the basic element in successful practice.

Somewhere between the fine arts and the applied sciences, then, but closer to the former than to the latter, stands the art of teaching. In so far as psychological principles can explain and rationalize successful practice, the study of psychology by the prospective teacher will have a positive value, but no amount of psychology can take the place of the study of the actual concrete process of teaching as it is carried on by a master, coupled with the patient self-discipline that comes from true apprenticeship. The value of psychology from this point of view is not to furnish general principles from which specifics for practice may be derived, but rather to furnish an interpretative basis for a study of practice. It is not a propaedeutic to teaching in the sense that physics is a propaedeutic to engineering; it is rather an accompaniment, bearing to the curriculum for the prospective teacher a relation analogous to that which the study of color theories bears to the curriculum of the artist, or the study of counterpoint and harmony to the curriculum of the musician. In so far as the arts of painting and music are concerned, the classroom where theory is taught is an adjunct to the studio where the chief work of training is concentrated; in so far as the art of teaching is concerned, the classroom in psychology is but an adjunct to the laboratory school where participation in the actual task of teaching may give to the novice something akin to the deft touch of the experienced teacher.

PSYCHOLOGY NECESSARY TO A SOUND VIEW OF EDUCATION

It is unfortunate that educational theory, of which psychology is a part, has suffered quite undeserved condemnation merely because of its inadequacy for prescribing technique. There has been a very general failure to recognize that the study of theory exercises an important function that is quite independent of its influence upon the art of teaching. While the young teacher will depend largely upon imitation and practice to master the technique of his art, and while the normal school in consequence must first of all provide abundant opportunities for the successful mastery of technique in this empirical fashion, it should not be forgotten that the teacher should be some-

thing more than a craftsman. If the ideals of democracy are to be reflected in the educational system, the teachers themselves must be charged with some measure of responsibility for constructing, evaluating, and criticising general educational proposals and programs; they must know the relation of education to other social forces; they must know what functions education has to discharge, what institutions and agencies are available, and under what limitations these institutions and agencies do their work. The process of teaching is, of course, the primary concern of every teacher, but education comprehends far more than this, and the teacher is a minister of education.

The capacity thus to share with one's colleagues the responsibility of determining educational policies may bear no discoverable relation to one's actual skill as a teacher. It is, indeed, quite possible that a training limited to the skill aspects of teaching may produce a type of classroom efficiency marvelously well adapted to an educational system that is organized on the factory plan, — a system in which the thinking, the planning, and the responsible direction are centralized in a single official, or in a group of officials, standing over the classroom teachers much as the boss in a factory stands over the workers. This situation is not unlike that in which American education is involved to-day—and such a situation should not continue. The teachers themselves should have a very large part in determining the educational policies of the country, and with the mature, well-trained, and relatively permanent teaching staff which we hope will shortly replace the present immature, untrained, and short-lived body of teachers, we may look forward hopefully to the realization of the democratic ideal. Not all can be leaders, but in an effective democracy all must be intelligent interpreters and critics.

TWOFOLD REQUIREMENT FROM PSYCHOLOGY

We conclude, then, that the study of psychology in the teacher's curriculum has to fulfil two fairly distinct functions: (1) it must provide a basis for explaining and interpreting successful teaching practices as well as principles from which to derive new and better practices; and (2) it must furnish a working theory of the mental life as a basis for understanding the larger problems of education, many of which are only remotely connected with teaching.¹ For the latter purpose psychology is only one of

¹ The failure to recognize this twofold function of the study of psychology is doubtless responsible in large part for the conflicting views regarding the actual value of this subject in the professional preparation of teachers.

On the one hand, there is the type of evidence that is represented by the report of the Wisconsin normal school survey (1914), summarizing data gathered from replies by training-school principals and critic teachers to the question, "Whether psychology and pedagogy as taught in the normal department helped students in their teaching in the training school." Unfortunately for our purposes, psychology and pedagogy were not separated in this question; consequently the proportion of the criticisms to be charged against psychology is difficult to determine. From individual replies published in the report, however, it would seem that the courses in pedagogy are somewhat less severely criticised than the courses in psychology. Of the sixty persons replying to the question—

18.3% state that psychology and pedagogy help the students in their practice teaching;
66.6% state that these subjects do not help or that the help is slight;
15.1% state that they are unable to judge.

The detailed criticisms that are reproduced in the report emphasize particularly—

(a) The academic nature of psychology and pedagogy as these subjects are commonly taught in the normal schools;
(b) The immaturity of the students at the time when these courses are taken;

several subjects of study, each of which should contribute its quota of principles, hypotheses, and points of view to a general theory of education. A substantial groundwork in biology is doubtless as important in this regard as psychology, while the claims of economics, sociology, and the history of education should not be overlooked.

Altho these two functions of psychology are distinct, they can be fulfilled in part by the same courses. In one-year and two-year curricula, the first function is the more important, for while the teacher must be something more than a craftsman, he must be a craftsman first. Indeed, if he is to work in the schools for only a limited period, his contributions to constructive educational policies will necessarily be very slight. The shorter curricula, then, may well afford to emphasize the kind of psychology that bears most directly upon the art of teaching. Furthermore, the courses in systematic psychology will mean much more to the student if he has approached them gradually thru a study of the concrete facts illustrated in the processes of teaching and learning. These courses may well be reserved, then, for the later stages of the longer curricula, where they will be taken by students who are presumably looking upon the work of teaching as a permanent career.

PROPOSED ORGANIZATION OF COURSES IN PSYCHOLOGY

Consistently with this view, the following organization of the work in psychology is suggested:

1. In all professional curricula on the collegiate level there should be an introductory course preceded or paralleled by a course in biology, and closely related to the student's participation in the work of teaching. This course should furnish a bird's-eye view of the teacher's task, and, like the first professional course proposed for the rural certificate curriculum,¹ might well be termed an "Introduction to Teaching" rather than an introduction to psychology. Aside from an initial effort to define in simple and concrete terms the problem of teaching, it would be largely psychological in its character, very concrete and "practical" in its content, and concerned with such topics as instincts, habits, the laws of learning, the technique of study, and the significance of individual differences—topics that have a definite application to classroom teaching. Something regarding the mental characteristics of children at successive levels of growth and development should also be included. The purpose of the course should be not to cover the ground intensively, but rather to do what the name implies—provide an introduction. It should furnish a point of view and a terminology for later work.²

(c) The wide gulf between theory and practice;

(d) The lack of constant or frequent use in psychology classes of the material for illustration and demonstration that the training school affords.

On the other hand, the questionnaire submitted to graduates of the Missouri normal schools regarding the professional courses that had proved of largest value to them in their actual work as teacher gave the third place to psychology in a group of nine subjects. (See page 442.) It should also be noted that J. L. Meriam's study, *Normal School Education and Efficiency* (New York, 1906), revealed a higher correlation between class standing in psychology and success in teaching than between success in teaching and class standing in any other normal school course except practice teaching.

¹ See page 174.

² There is abundant evidence that the traditional course in general psychology is not needed as a basis for a course

2. This introductory treatment should be amplified in all of the courses that follow. In other words, every course in the normal school should be in an important sense a course in psychology. The abundance of opportunities for realizing this aim will be referred to in the following sections. It is sufficient here to point out that there is no better place to teach the important facts regarding individual differences than in the courses on school management and the technique of teaching; nowhere may the characteristics of the child's mind in its successive stages of growth be more clearly illustrated than in connection with the work in reading and arithmetic; while the principles of habit formation and the laws of learning may be applied and exemplified in every subject and every class.

3. Finally, the student will come to the systematic courses, which should be designed to bring together in a comprehensive and orderly manner the detailed facts with which by this time an intimate acquaintance will have been gained. This treatment should be attempted even in the shorter curricula to the extent of gathering together the important precepts and principles that relate to the art of teaching. In the longer curricula, however, it should have the wider aim of leaving with the student a fairly definite body of educational doctrine to prepare him for the kind of constructive thinking referred to above.

The general principle of curriculum organization here proposed will be emphasized in discussing other subjects as well as psychology. In essence, it involves the integration of all of the work of the normal school into one consistent whole. A true curriculum is more than a mere aggregation of courses, it is an organization dominated by a unitary purpose. If this principle is to be worked out effectively, each instructor must necessarily be familiar with the work of the other instructors. There must be frequent conferences upon the ever-recurring problem of making each element in the curriculum—not only each course, but each topic in each course—contribute its maximum of influence toward the effective working of the whole. The careful, periodic adjustment of the various parts of the educational organism is just as necessary as the careful, periodic adjustment of a watch or of any other finely organized structure. It makes for a maximum of efficiency and a minimum of waste. Applied to the particular departments under discussion, it would not only prevent needless duplications and repetitions of the same materials in different courses, but it would ensure them when needed. There would be an end to the student's complaint that what he has been taught in one course is retaught in another as tho it were being

that deals primarily with the psychological interpretation of the art of teaching. A committee of the American Psychological Association, of which Professor G. M. Whipple was chairman, reported in 1910 that educational psychology did not need this general basis. ("Teaching of Psychology in Normal Schools," *Psychological Monograph*, vol. xii, No. 51, 1910.) In the departments of education in several universities introductory courses in educational psychology are offered without a prerequisite in general psychology, and are completed successfully by students who have not had courses of the latter type. For example, Teachers College, Columbia University, after some years of requiring general psychology as a prerequisite, now offers the following course: "Educational Psychology. . . . This course gives a general treatment of the elements of educational psychology. It is designed to meet the needs of graduate students who have had little or no previous training in psychology." (*Announcements*, 1916-17, page 46.) Harvard University, the University of Missouri, and the University of Illinois also offer courses in educational psychology without requiring general psychology.

presented for the first time. There would be an end also of the too well-founded criticism that the courses in theory have no influence upon practice—are not even reflected in the practical courses offered in the same school.

(2) HISTORY OF EDUCATION

COURSES OFFERED IN MISSOURI SCHOOLS

A course in the history of education is prescribed for the two-year curricula in both of the city training schools and in all of the state normal schools except Cape Girardeau. The amount of work required varies, however, from thirty class periods at Kansas City to sixty at Kirksville and Springfield, eighty at Harris Teachers College, and one hundred twenty at Warrensburg and Maryville. The character of the prescribed work also varies. At Kirksville only the first term is required in the two-year curricula, altho a second term is demanded for the three-year and four-year curricula. The first term's work covers the long period from the earliest times to the eighteenth century; consequently the student who remains for only two years has a fairly comprehensive course in the history of education during the ancient, mediaeval, and early modern periods, but nothing of the very important developments of the past two centuries. Much more reasonable is the practice at Springfield, where the history of elementary education (a one-term course) is required for the two-year curricula, while in the longer curricula one additional term covering the general field is prescribed. At the Harris Teachers College the course covers the general field, but the greatest emphasis is laid upon the modern period.¹

FUNCTION OF HISTORY OF EDUCATION IN THE PROFESSIONAL PREPARATION OF TEACHERS

In spite of the wealth of material available for these courses in the history of education, the value of the study in curricula for the preparation of teachers has been more frequently and more seriously questioned than has the value of any other strictly professional course. The Missouri teachers who were asked to rank the professional subjects in the order of their influence upon the actual work of teaching almost invariably placed the history of education very low in the scale, and in the combined rankings it is not only found at the foot of the list, but the margin that separates it from the other courses is so wide as to indicate a very general skepticism as to its worth.² Similar doubts as to the importance of the study in affecting the student's later practice are forcibly expressed in a symposium³ on the professional

¹ In the general courses, Monroe's *Textbook in the History of Education* is listed as the basic text except at Kirksville, where the work is apparently based upon the instructor's syllabus. No report on the history of education was received from the Kansas City Training School. Extensive collateral readings are required in all of the schools; the supplementary books most frequently mentioned in the instructors' outlines are: Graves's *History of Education*; Laurie's *Pre-Christian Education*; Monroe's *Source-Book*; the textbooks of Kemp, Compayré, and Davidson; Quick's *Educational Reformers*; the "Great Educators" series; Painter's *Pedagogical Essays*; and, as source materials, the *Emile*, Spencer's *Education*, and Pestalozzi's *Leonard and Gertrude*.

² See page 442.

³ *Yearbook*. Society of College Teachers of Education, 1912. Judd and Parker (*Bulletin* No. 12, United States Bureau of Education, 1916) also speak strongly against the requirement of the history of education in the two-year curricula.

subjects prepared for one of the meetings of the Society of College Teachers of Education.

On the other hand, when eighty school superintendents, high school principals, and college teachers of education were asked to rank eighteen different professional courses ordinarily offered in university departments of education in the order of their value in the training of high school teachers, the combined ratings gave the history of education a respectable place.¹ And it is undoubtedly true that the courses in the history of education have a much better status among members of college faculties than have any other courses given by the departments of education.

It is probable that these differences of opinion are due in part to the failure to recognize, as in the case of psychology, that the value of a subject in a prospective teacher's curriculum is not to be measured entirely by the influence of this subject upon the technique of teaching. The direct influence of the history of education would, indeed, be less than that of psychology, but its indirect influence may be far from negligible and its contributions to what we have termed the "professional intelligence" of the teacher are of obvious importance. The instructors in this subject, indeed, lay a large emphasis upon this last-named factor. The function of the study is frankly "interpretative;" its essential outcomes are to be expressed not in increased skill, but in such terms as "interpretative backgrounds," "points of view," "appreciative attitudes," and the like.²

It would indeed be unfortunate if the demand for the immediately "practical" should blind one to the importance of ensuring the attitudes and points of view that only historical study can furnish. Nevertheless, in spite of the fact that many of those opposed to the history of education condemn it simply because it seems to lack immediate utility, there is a serious question as to whether the present organization of the subject in typical normal school courses furnishes the most practicable means of attaining these desired results. A painstaking examination of the courses

¹ See H. A. Hollister; *Courses in Education Best Adapted to the Needs of High School Teachers and High School Principals*, in *School and Home Education*, xxvi ; 8, 216 (April, 1917). The various courses were found to stand in the following order: Educational psychology; technique of teaching; teaching of special subjects; principles of secondary education; theory of teaching; principles of education (general course); history of education (general); educational sociology; history of education in the United States; educational measurements; the psychology of subjects; high school curricula; philosophy of education; genetic psychology; high school administration; supervision of instruction; the curricula of the schools (general); practice teaching; industrial education; educational classics; school supervision; educational administration (general); foreign school systems. This ranking represents the courses as they were rated for the training of high school teachers; the ranking for the training of principals was somewhat different. It should be noted, of course, that in either case the situation is not quite comparable with that which is involved in considering the history of education as a part of two-year curricula for elementary teaching.

² The following statements are quoted from the answers given by instructors in the history of education to the question, "What is the specific aim of the course?"

"A more intelligent grasp of educational problems. Wider conceptions of the teacher's work. The present understood through the past."

"To give the student an understanding of our present educational theory and practice through a study of its development and evolution."

"To give the student the proper historical setting for all educational theory and practice."

"To interpret and evaluate present educational problems in the light of past school experience."

"To give a deeper appreciation and better understanding of our present educational situation when viewed from an historical standpoint."

"To acquaint the elementary teacher with the special significance and importance of elementary education as revealed in the history of that institution. To make intelligent a great many of the current educational practices."

given and of the work done in the classes offers convincing evidence that the courses in the general history of education are not suited to students of the junior college level; they are distinctly senior college or university courses, presupposing a maturity of mind, a breadth of outlook, and a historical and philosophical background that it would be hopeless to expect in a student just out of the high school or with but a year's collegiate work.¹ As an advanced study, forming the climax of a three-year or four-year curriculum, the history of education can be made, and doubtless frequently is made, to realize its rich possibilities. As an elementary study, undertaken early in the period of professional training, or as a part of the brief and congested one-year and two-year programs, its justification is certainly debatable. It is possible that, in a two-year curriculum, a summarizing course which will treat the principles of education genetically may have a legitimate place. This possibility will be referred to in the following section.

SUGGESTED REARRANGEMENT OF HISTORY OF EDUCATION

The real need, however, is that the principle to which reference was made in the discussion of psychology should be applied likewise to the history of education. There would be a distinct advantage in making each teacher of the specific courses in methods, school management, and the principles of teaching responsible for the historical aspects of his subject. The significance of the modern methods of teaching reading, for example, is much more keenly appreciated by the student if he knows something of the older methods of teaching reading, and the appropriate point, indeed the only effective point, at which to give the student this historical perspective upon the reading problem is in the specific course that deals with primary reading. Again, the courses in arithmetic and in the teaching of arithmetic offer innumerable occasions for illuminating present practices thru references to the development, both of arithmetic itself and of the methods of teaching it to children. The modern conceptions of geography and history as component parts of the elementary program faithfully reflect the fundamental doctrines of the important modern educational reformers from Pestalozzi, Froebel, Herbart, and Herbert Spencer to contemporary leaders like John Dewey; in presenting these conceptions as they recur in the specific courses in geography and history, there is the best possible opportunity to give the student an initial acquaintance with the philosophy on which they rest. The study of school management and the technique of teaching is probably best approached by the same genetic method; the apparently trivial details of classroom routine, for example, take on a new meaning when their development is traced from the old days of individual instruction, thru the innovations of the Jesuits and the Christian Brethren and the

¹ The classes in the history of education in the Missouri normal schools in the spring of 1915 were made up predominantly of second-year students; in no case was a pupil of secondary grade registered, and in only one class out of eight reporting was the registration predominantly of first-year students. At the Harris Teachers College, the work in the history of education is given in the last semester of the two-year curriculum; at the Kansas City Training School, the course is given in the last ten weeks of the second year.

contributions of the Bell-Lancaster schools, to the modern system of classroom organization; the discussion of school discipline forms a most effective setting for significant references to the historical development of individualism in education, and some of the important ideas of such reformers as Rousseau, Froebel, and Spencer can here be introduced as growing out of concrete problems. It is a sound psychology that associates the earlier stages of an institution or of an educational practice with the treatment that most completely reveals its modern significance. The "practical" courses not only afford the natural opportunities for this; they are urgently in need of the illumination and enforcement that comes from skilfully laid historical perspectives. Moreover, most topics gain enormously in weight and dignity when so treated. The handling of educational concepts as growths demanding development in accurate and disciplined thinking on the part of the student is an essential characteristic of instruction that may properly be considered to be of collegiate quality.

The treatment proposed is a most effective propaedeutic for the systematic courses. The principles of curriculum construction that were emphasized in the discussion of psychology have a most important application here. The systematic work in the history of educational theories, like the systematic courses in psychology, fulfils its proper function in preparing the teacher not for technical duties of the classroom but for constructive thinking regarding general educational problems. The place of this work in the shorter curricula, therefore, is less important than in the longer curricula, not only because the students are not so well prepared for it, but because it will be of large service only to those who remain long enough in the profession to have a share in determining educational policies.

(3) GENERAL METHOD AND PRINCIPLES OF TEACHING

The term "general method" has an interesting history. In American normal schools from 1870 to 1890, instruction in the technique of teaching was based upon such books as White's *Pedagogy* and Fitch's *Art of Teaching*. These are in the main simple compilations of the rules that long experience in classroom work has established. They were most serviceable books in their day, and the general type of handbook that they represent is still useful as a guide to young and inexperienced teachers. Such books, however, are essentially empirical in their character, for while they sometimes attempt to justify the practices that they recommend upon the basis of general principles, the latter are usually little more than palpable truisms. Courses based upon such materials are far from satisfactory in classes above the secondary level.

The development of "general method" constituted in American pedagogy the first significant step away from this rule-of-thumb procedure and toward the development of a consistent and unified theory of teaching. A "general" method of teaching, obviously, is a method that may be applied to any given teaching task; it is a procedure of universal validity. The Herbartians believed that they had found this in the

five "formal steps," each with its distinctive purpose and all coöperating toward the consummation of the teaching process as they conceived it, namely, the development in the mind of the learner of a general truth. It was this procedure, derived from Herbart's analysis of the development of ideas and elaborated by his followers, especially Ziller and Rein, that constituted the "general method" introduced into American normal schools and university departments of education during the decade following 1890.¹ The movement to extend normal school curricula beyond the secondary level — already well under way at this time — and the rapid growth of departments of education in the colleges and universities had led to a demand for something more clearly consistent with collegiate standards than the older books on pedagogy represented. The Herbartian theory of teaching promised at first to meet this demand.

Modern developments in psychology, particularly as influenced by the theory of evolution and by the experimental method, also began at about this time to affect the professional courses in the normal schools and colleges. The cult of "child study," which assumed the evolutionary point of view, tended to shift the emphasis in professional training from the subject-matter, where the Herbartian doctrines placed it, to the child and to the development of his body as well as of his mind. At the same time the experimentalist in psychology displayed a profound contempt for the "armchair" speculation that had preceded the day of the psychological laboratory, even discrediting the work of so keen and competent a philosopher as Herbart. Meanwhile, the assumption that the procedure crystallized in the five "formal steps" of Herbart constituted a method applicable to all teaching situations could not long be sustained even philosophically. While the theory worked admirably in certain types of school exercises, there were other lessons, known empirically to be essential to the progress of children, that could not be fitted into these forms. "General method," then, while a notable advance over the kind of pedagogy that had preceded it, came upon the stage just a little too late to be long influential.

The Herbartian sway lasted in Missouri until about 1905, and still persists in some of the schools in the name of the course, "general method." But the content of this course has been greatly modified, and the term "principles of teaching," a much more appropriate designation, has largely replaced the older name. In this transformation, the influence of modern psychology was first most strongly felt, and the scientific attitude assumed by psychology caused a return to something like the empirical treatment characteristic of the older books on pedagogy. The attempt was made, however, to justify successful practice by reference to accepted psychological principles, and in some cases to derive new precepts of practice from more general principles. A little later the influence of John Dewey began to be felt in the courses in principles of teaching, especially in the emphasis placed upon teaching thru "prob-

¹ The leaders in the Herbartian movement in America were Charles De Garmo, who published his *Essentials of Method* in 1890, and Charles A. McMurry and Frank M. McMurry, the former of whom issued a *General Method* in 1893, and both of whom published as joint authors in 1898, *The Method of the Recitation*, by far the most influential book that the Herbartian movement produced in America.

lems" and "projects," and in the importance attached to the "socializing" features of both subject-matter and methods of teaching. Indeed, the emphasis now being given to the "problem" method suggests that the present tendency is again toward an *a-priori* theory of practice.

PRESENT STATUS OF "GENERAL METHOD"

Whatever may be its name, the course in principles of teaching, as offered in Missouri, is now a combination of general educational theory and the technique of teaching. A study of "lesson types" is almost always a feature of the course, and this is commonly accompanied by the preparation of lesson plans. In this sense, especially, the course becomes an introduction to practice teaching, and is usually listed as a prerequisite. Aside from the treatment of lesson types, the courses vary widely in content according to the particular theory of education subscribed to by the instructor.

In spite of their nebulous character, the courses in general method and the principles of teaching seem to meet a real need. The teachers of Missouri who rated the professional subjects in the order of their importance place these courses second, giving the first place to courses in "special methods."¹ It is impossible to determine from the replies whether the theoretical or the practical phases of the courses are adjudged to be of the greater value, but in view of the fact that the special-methods courses are rated highest, one may infer that the opportunity to study the actual technique of teaching is the important contribution of the courses in principles of teaching. The Harris Teachers College does not offer a course in general method, but the principles that underlie all of the detailed work of the first three semesters are gathered into a comprehensive summarizing course in the principles of education in the final semester.

MOST ADVANTAGEOUS POSITION OF THE COURSE

The arrangement of the courses at the Harris Teachers College suggests again the advantage of postponing the systematic discussion of educational theory until well toward the end of the curriculum. If this is done, the course in principles of teaching may be made definitely to concern itself with the technique of teaching. This does not mean that the course should exclude educational theory, or that it should return to the status of the old-time, rule-of-thumb "pedagogy;" it means rather that theory should emerge from the study of actual practice and not be imposed as a set of fundamental principles from which valid precepts of practice can be deductively derived; it means that the student should from the outset be placed in a position where he will be stimulated to think out for himself the reasons for the success or failure of this or that practice. Such thinking will necessarily be crude and unsatisfactory at the beginning, and here lies the opportunity of the instructor to guide the student in the construction of adequate educational standards.

The proposal here, as in connection with the courses in psychology and the history

¹ See summary on page 442.

of education, is simply to apply to the professional preparation of teachers the inductive procedure which educational theory itself has long endorsed, and which has been applied with most notable success in other types of professional education, particularly in law and in medicine. It is true that legal education in the United States offers unique opportunities to follow an inductive method, for the common law, as Professor Redlich so clearly points out,¹ "is case-law and nothing else than case-law;" whatever general principles it involves have come out of actual decisions of the courts in trying individual cases, and the most effective way for the law student to gain a comprehension of these principles is to analyze and compare actual cases. It is probable, indeed, that many of these principles defy actual formulation in words; thru a rigid analysis of concrete cases the student seems gradually to come to the point where he "feels" without formulating the standard upon which this or that issue may be decided.

The situation in respect to the actual work of classroom teaching is, in many respects, analogous to this. No one has as yet definitely formulated a body of doctrine which can be given to a young teacher with the hope that, thru its application, he will be able to solve all of his problems successfully. The fact that the preliminary study of educational theory has often either no influence upon later practice or an unfortunate influence has been pointed out again and again. This is not so much an indictment of theory as an indication that the theory has come at the wrong time, has been approached in the wrong way, and has been directed, so to speak, toward the wrong end.

(4) SCHOOL MANAGEMENT, CLASS MANAGEMENT, AND SCHOOL ECONOMY

Under one name or another a course in school management is required in the two-year curricula of all of the Missouri normal schools except Kirksville, and a course combining school management and the theory of education is required in the fourth or last semester of the two-year curriculum at the Harris Teachers College. In the normal schools, the course is commonly covered in a twelve weeks term, five hours a week. It is partially differentiated from the course in principles of teaching by laying the chief emphasis upon the problems of classroom technique, including routine, program-making, grading and classification, and discipline. The essentials of school hygiene are also as a rule included in the course, and whatever explicit instruction the student receives in professional ethics is likely to be given here.

As compared with the courses in the principles and technique of teaching, the instruction in school management is likely to reflect the conditions of successful practice rather than to develop an ideal procedure from a preliminary study of theory. Most of the rules and precepts of management, indeed, simply formulate the conclusions that generations of teachers have drawn from their experience in organizing

¹ *Bulletin Number Eight*, Carnegie Foundation, New York, 1914, page 35.

schools and managing children, altho modern textbooks usually present these rules and precepts with some attempt to justify them theoretically. Fundamental questions of educational theory, however, are very seldom encountered except in the treatment of discipline, and even here the emphasis is largely upon the specific methods and devices by means of which order and control may be established and maintained.

RELATION TO OTHER SUBJECTS

In its relation to the general scheme of curriculum organization which has been discussed in the preceding sections, the course in school management raises some interesting questions. In the first place, is the distinction between management and teaching a valid distinction? Would it be possible or advisable to combine the materials of the two courses into a single unified treatment? Does not this very practice of treating the technique of teaching and the technique of management in separate courses leave with the student an impression that his later work will be of two distinct types rather than the conviction that good teaching always involves good management? In the second place, granting the importance to the young teacher of gaining a familiarity with the approved procedure in organizing and managing a school or a classroom, would it not be well to bring discussion of this procedure into the closest possible connection with the classroom situations and problems to which it pertains? In other words, should not the course in school management parallel the work in observation and practice teaching and concern itself largely with the problems that actual classroom teaching involves, utilizing these as texts for the presentation and discussion of methods and devices?

As regards the first group of questions, the advantage of conceiving the act of teaching as a single process is obvious. On the other hand, there is this justification for separating the problems of management from those of teaching: the former should be considered always as subordinate to the latter in the sense that routine, order, the daily program, and other phases of management exist only for the purpose of making real teaching possible. If this conception of the function of school management is kept continually before the students, there will be little danger of over-emphasizing the significance of the materials of the course, or of considering them as representing anything more than the technical prerequisites of good teaching. Excellent teaching may in itself solve some of the problems of management, particularly those concerned with discipline, but the best teaching cannot compensate for unhygienic classroom conditions, for a badly arranged daily program, or for wasteful and inefficient routine. A separate treatment, however, does not necessarily mean a separate course. Where a full semester is available, it is doubtless excellent practice to combine the materials in a single course.

In respect to the second group of questions, there is every reason to believe that both school management and the technique of teaching will be taught most effectively if they accompany practice teaching. There are difficulties to be overcome in

carrying out this plan. The student who takes charge of a practice class is in a somewhat different situation from one who studies technical processes by undertaking actual work in a shop, a laboratory, or an office, for the blunders of the latter are not nearly so costly as are those of the amateur teacher. It is obvious that the danger of initial mistakes in practice teaching must be reduced to a minimum, and consequently some instruction in the technique both of teaching and of management must be given prior to the period of actual practice. It should be feasible to provide this preliminary instruction during the study of classroom work in the term or semester before practice teaching is undertaken. The systematic courses in management and the technique of teaching could then parallel practice, the various topics being correlated as far as possible with the problems that emerge in the student's own attempts to organize, manage, and teach.

(5) OBSERVATION, PARTICIPATION, AND PRACTICE TEACHING

The training school constitutes the characteristic laboratory equipment of a normal school or teachers college, and the courses in observation, participation, and practice teaching should be looked upon as the central and critical elements in each of the curricula. An examination of these courses as they are actually administered in the Missouri normal schools leads one to the conviction that, fundamental as the work is asserted to be, its theoretical values are seldom realized in practice. It is not too much to say, indeed, that the training department is the weakest part of the structure, and the same thing is probably true in many, if not in most, of the state normal schools in this country.

(a) SIZE OF THE TRAINING SCHOOL AS RELATED TO NORMAL SCHOOL ENROLMENT

One reason for unsatisfactory conditions in training schools, both in Missouri and in the country at large, is to be found in the small number of pupils commonly available for training purposes. Unlike the city training school, the state normal school has usually no legal connection with the local elementary and high schools. As a consequence, it cannot commandeer a sufficient number of pupils to provide adequate practice facilities, and its training school must be built up by the adoption of measures that are likely to give it a pupil body that is both limited in numbers and unrepresentative of normal social conditions. In some cases it becomes a select school with a "waiting list;" or it may go to the opposite extreme and become a dumping-ground for difficult pupils that local schools are glad to be rid of. The enrolment is likely to be small and the practice classes so attenuated in numbers as to afford little opportunity for the necessary instruction of the student-teacher.

CONTROL OF LOCAL SCHOOL FACILITIES INDISPENSABLE

It is unfortunate that normal schools should ever be located in towns so small as to preclude an abundance of what may be termed the "laboratory" or "clinical" material of a teacher-training program,—namely, elementary and secondary pupils. Where schools have been thus located, their only salvation lies in an arrangement whereby all of the local public schools may be available for training-school purposes under the direct control of the training department of the normal school. Even where a good sized independent training school is possible, it is extremely desirable for the local school system to be related to the normal school in such a manner as to afford opportunity for extensive observation, participation, and practice under wholly normal conditions. In larger towns and cities, the training school may well be a ward or district school of the public school system. Care must be taken in organizing a training school under this plan, and infinite tact must characterize its administration. There is no doubt, however, that a town, especially a small town, is under great and constant obligations to a state normal school located within its limits. Nor is there doubt that a well-managed normal school, with its expert knowledge and its thorough supervision, would almost invariably give such a town a better school or school system than the town could provide for itself. There is every reason, therefore, why an arrangement so vital to the school should be required of the community as a condition of retaining the school.

This appropriation of local school facilities for training-school purposes has proceeded apace during the past few years in various parts of the country, and where soundly organized has proved successful. Generally speaking, the policies of the school that is used for training purposes must be determined by the normal school authorities; a plan of dual control thru which responsibility and authority are divided between the local superintendent or school board on the one hand and the normal school on the other hand is very hard to administer. Where difficulty is found in winning support for the plan in a community, some financial inducement, such as the payment of teachers by the normal school, must be resorted to. Even in case of a state school the character of the situation is of such delicacy that it would probably be wise to guarantee the community such facilities as it would not purchase for itself, in return for complete educational control of its schools.

MINIMAL STANDARDS OF PRACTICE FACILITIES

Whatever its arrangements, a normal school should not attempt to attract students out of proportion to its laboratory facilities. It becomes important, then, to agree upon certain minimal standards which will indicate the enrolment that a training school should have if the normal school is to do the work that it proposes. It is in connection with practice teaching, rather than with observation and participation, that the need for a sufficient number of pupils is most imperative; consequently the size of the "practice class" may be taken as the unit from which to work in construct-

ing a minimal standard. In the provisional curricula for teacher-training institutions which were distributed by the Foundation¹ in 1917 for criticisms and suggestions, the minimal size of the practice class was assumed to be twelve pupils. The replies from the critics of these curricula indicated a general conviction that this minimum was too low. The questionnaire investigation of training-school organization made by A. M. Santee² in 1917 showed the median size of the practice class in seventy state normal schools to be between fourteen and sixteen pupils. In view of these facts, it is probable that the unit should number at least fifteen pupils in the sense that the training school should be able to provide sections of at least this size for all of the students who are assigned to practice teaching during any one term. This does not mean that the teaching of smaller sections is not sometimes both desirable and profitable. In what has been referred to as "participation," it is often well to have a student conduct an exercise with four, five, or six pupils, or even with a single individual. Practice teaching, however, should be done under conditions measurably similar to those of public school organization, and while fifteen pupils would be a much smaller group than the average public school class, the number is sufficient to present most of the problems of control, organization, and group teaching with which the student-teacher should become familiar. For the beginning teacher a class of this size is to be preferred either to the very large or to the very small group, altho before completing the course each student should have some experience in managing a large class of thirty to forty pupils.

The total number of pupils needed in the training school is, obviously, not to be determined simply by multiplying the number of pupils in the unit practice class by the number of student-teachers. In the first place, the student in all likelihood will not teach during the entire day, consequently one section of pupils will provide practice for more than one student-teacher. The amount of practice teaching required varies widely among the different normal schools. In somewhat more than one-half of the seventy state normal schools already referred to, a full year of teaching is required, but, in most cases, only one period each day is given to this work. In other schools the teaching is concentrated within shorter periods, but a longer time is required each day. In computing the needed enrolment of the training school, therefore, this variable must be determined in each case. A second factor can for our purposes be reduced to a constant. While in nearly one-half of all training schools all of the actual teaching is done by student-teachers, this practice is open to grave criticism. It may be laid down as a fundamental rule of training-school organization that certainly not more than three-fourths of the work of any training-school pupil should be under the direction of practice teachers, and the limitation of this proportion to one-half would be much better. By taking into account all of these factors,

¹ *Curricula Designed for the Professional Preparation of Teachers for American Public Schools*, Carnegie Foundation, 1917.

² *The Organization and Administration of Practice Teaching in State Normal Schools*, A. M. Santee. See *School and Home Education*, September, 1917.

it would be a relatively simple matter to determine the smallest number of pupils that must be in attendance upon the training school if the requirements laid down by the normal school for the courses in practice teaching are to be met. Adding fifteen per cent to allow for the relation between enrolment and attendance, and another fifteen per cent as a margin to ensure sections of at least fifteen pupils, simple formulae may be constructed involving these factors and proportions thus:

$$n = 1.30 \left(\frac{15 s c m}{t} \cdot \frac{4}{3} \right)$$

if three-fourths of the teaching is to be done by student-teachers; or

$$n = 1.30 \left(\frac{15 s c m}{t} \cdot 2 \right)$$

if one-half of the teaching is to be done by student-teachers.

In both of these formulae:

n = minimal training-school enrolment.

s = number of students to whom practice-teaching privileges must be available each year.

c = number of recitation units during which each student will be in charge of a section each week.

m = proportion of total year during which practice teaching is required of each student.

t = approximate number of recitation units in the training school each week.
(Under ordinary conditions this may be considered as thirty, or six periods each day for five days.)

It is interesting to apply these formulae to the Missouri normal schools,¹ but in so doing one should remember that the requirements for practice teaching in all of the schools are unusually low, and that consequently the enrolment in the training schools, while quite inadequate even to these low requirements, would be hopelessly deficient if practice teaching were required in all curricula, as it should be, or if the

Institution	Enrolment in Training School if Minimal Standards had been met		Actual Enrolment in Training School
	a	b	
Kirkville	315	215	145 ²
Warrensburg	945	630	325
Cape Girardeau	434	289	161
Springfield	456	304	245
Maryville	216	144	104

^a If one-half of the teaching were done by student-teachers.

^b If three-fourths of the teaching were done by student-teachers.

¹ In making these calculations, the number of students in the graduating classes (1916) in curricula that include stated requirements in practice teaching and the time requirements for practice teaching as stated in the catalogue of the school were used as bases of the computation. The enrolments of the training schools were reported by the directors of the training departments in the fall of 1917. In taking the number of students who graduate as an index of the number for whom practice teaching must have been provided, the error, of course, is in favor of the school, for in all probability fewer students graduate each year (from the curricula requiring practice teaching) than are enrolled in practice-teaching courses during that year.

² Enrolment for winter term, 1918-19. No report for 1917.

present requirements were appropriately increased in the curricula in which practice teaching now finds a place.

The important point is that all of these institutions are limited in their laboratory facilities to independent practice schools. On the other hand, the city training schools and such state normal schools as have taken over the control of local schools are generally able to provide laboratory facilities in abundance. Harris Teachers College has under its immediate control, for example, the Wyman School, a typical elementary school enrolling over one thousand pupils. This school, which adjoins the college building, is used exclusively for purposes of observation and demonstration, the actual practice teaching being done in selected elementary schools in various parts of the city. In general the facilities for observation and practice in the city training schools are in startling contrast to the facilities in the Missouri normal schools, none of which has made the coöperative arrangement referred to above. The very large differences that may exist are illustrated in the following table:

STATE NORMAL SCHOOLS CONTROLLING ONE OR MORE LOCAL PUBLIC SCHOOLS				STATE NORMAL SCHOOLS LIMITED TO INDEPENDENT PRACTICE SCHOOLS			
<i>School</i>	<i>Colle- giate Enrol- ment</i>	<i>Pupils Avail- able</i>	<i>Ratio Students to Pupils</i>	<i>School</i>	<i>Colle- giate Enrol- ment</i>	<i>Pupils Avail- able</i>	<i>Ratio Students to Pupils</i>
Gunnison, Col. ¹	178	246	1 : 1.4	Kirksville, Mo. ³	530	145	1 : 0.27
Harrisonburg, Va. ²	289	1000	1 : 3.5	Warrensburg, Mo. ³	514	325	1 : 0.63
Westfield, Mass. ¹	167	500	1 : 3	Cape Girardeau, Mo. ³	432	161	1 : 0.37
Dillon, Mont. ²	242	600	1 : 2.5	Springfield, Mo. ³	607	245	1 : 0.40
De Kalb, Ill. ²	405	648	1 : 1.6	Maryville, Mo. ³	200	104	1 : 0.52
Keene, N. H. ¹	170	1300	1 : 7.6	Valley City, N. D. ¹	327	259	1 : 0.79
				Whitewater, Wis. ²	374	211	1 : 0.56

The above table gives simply the gross proportions between the actual number of students enrolled in the various schools and the number of pupils available for observation and practice teaching. While this is not a sound basis for determining whether the laboratory facilities of any one school are adequate, it constitutes a fair method of contrasting the situation in the two types of schools under discussion.

The table plainly suggests the very great advantage of securing control of the local public schools for observation and practice teaching. What this would mean for the four Missouri normal schools that are located in relatively small communities is indicated by the following table:

¹ Catalogue, 1918.

² Catalogue, 1917.

³ The enrolments for the Missouri normal schools are taken from the table given in the report of the State Superintendent of Public Instruction for 1916, except that in the case of Cape Girardeau, which apparently failed to report for 1915-16, the figures are for the preceding year. In each case, the enrolment as given includes those students who were registered from September to May. This excludes the large enrolment in the summer quarter.

<i>School</i>	<i>Total Collegiate Students</i>	<i>Training School Enrolment</i>	<i>Public School Enrolment of Community</i>	<i>Ratio of Students to Pupils Possible if Normal School controlled Local Schools</i>
Kirksville	530	145	1502	1 : 2.8
Warrensburg	514	325	1007	1 : 2.0
Cape Girardeau	432	161	2035	1 : 4.7
Maryville	200	104	1027	1 : 5.1

With such laboratory facilities as this arrangement would provide, the normal schools of Missouri would be in a position to do their work in a manner befitting its importance to the state. Certainly no town or city should be the seat of a state normal school unless it is willing to turn over to the state institution either all of its local schools or a sufficient number to provide ample facilities for demonstration, participation, practice teaching, and experimental education. It will almost certainly profit thereby both educationally and financially, and for the normal school the arrangement is indispensable. If Kirksville or Warrensburg, for example, had full use of the local public schools, its laboratory equipment would even then be none too extensive for the work that it is already under obligation to do.¹

(b) HOUSING AND EQUIPMENT OF TRAINING DEPARTMENTS

A second reason for the general inadequacy of the courses in observation and practice teaching may be found in the subordinate position that the training school has often been forced to assume in its relationships with other normal school departments. This subordination is noticeably revealed in the neglect in many cases to provide for the training school quarters and equipment that are at all comparable either with the quarters and equipment provided for the normal school classes, or with what the better school systems provide for their elementary schools.

In Missouri the situation in this respect varies among the different schools. At Kirksville, a "model" rural school building on the campus houses the twenty or thirty rural school pupils who are brought in from the surrounding country, but the practice school proper is quartered in one of the main buildings, partly in small inside rooms and in a dark basement. Warrensburg had provided a separate training-school building as early as 1908, and since the fire of 1915 has rebuilt and improved it. Cape Girardeau has had a separate building for the training school since 1903. It is constructed of stone and externally compares well with the main normal school building; its interior arrangements, however, are not well adapted to its purpose, nor is the equipment relatively as good as that of the main building, where spacious "society" rooms are idle most of the time. At Springfield a small and quite inadequate building, the "Greenwood School," just off the campus, provides accommodations for about two hundred pupils representing Grades III to VIII inclusive, while Grades I, II, IX, and X are located in the basement of the main building; this basement, how-

¹ In the Province of Ontario, the municipalities in which institutions for the professional preparation of teachers are located, freely give over their elementary and secondary schools for observation and practice purposes.

ever, is high and light, and the situation is better than at Kirksville. At Maryville the training school occupies commodious and comfortable quarters on the first floor of the main building.

The conditions at Kirksville are deplorable, and furnish a most uninspiring example to prospective teachers. When the school was visited in the spring of 1915, the first two grades were discovered in the basement of the main building in rooms thoroughly unsuited to the uses to which they were put. One would assume that, if adequate quarters could not be furnished to all, the smallest and most helpless children would have first attention; and one would also assume that, if either normal school students or training-school pupils must find quarters in the basement, it would be the former rather than the latter, for not only are the former the more mature, but as their daily programs are the more varied, there is much more movement from room to room, and the actual time spent in the classroom each day is appreciably shorter. Furthermore, prospective teachers could have no better object lesson than the assignment of the best quarters available to the use of the training school. These considerations do not seem to have appealed to the Kirksville authorities. Not only was the location of the training-school rooms unfortunate; the furniture in these rooms was in a bad condition. The desks were hacked and cut, and while some of the desks and seats were adjustable, the adjustments had either been made carelessly or neglected altogether; some desk tops stood at a sharp angle.

BAD CONDITIONS EASILY REMEDIED

In practically all of the training schools the hygienic conditions of the classrooms left much to be desired. Faulty lighting,¹ while not universal among the schools, was met with frequently; the posture of the pupils was noticeably bad in every school except one; poor blackboards were found all too commonly. If there is any single, simple thing that the normal school can do in the preparation of teachers, it is to acquaint its students with hygienic standards, impel them to form habits that will enable them to look after these matters automatically, and develop in them a sensitiveness to unhygienic conditions that will detect at once defects so easily remedied as those just mentioned. There may be some excuse for a normal school that fails to train all of its students adequately to apply every principle of teaching; there can be no excuse for failure to look after fundamental duties, especially when they demand but a minimum of thought and depend on simple habits that any one may acquire if only example and a little drill are added to brief instructions.

The housing and equipment of the training schools, as has been suggested, are primarily significant to the present discussion because they reveal a characteristic status of the training department that is fatal to its efficiency. In too many normal schools throughout the country, the training school is in the "basement," and the

¹ Especially lighting from the right hand or from two sides without care in providing shades to prevent cross shadows.

phrases, "going down for practice," "the people downstairs," and the like, have much more than a localized vogue, as well as much more than a literal implication.

(c) RELATION BETWEEN THE TRAINING SCHOOL AND OTHER NORMAL SCHOOL DEPARTMENTS

By far the most significant weakness of the courses in observation, participation, and practice teaching is the general lack of a satisfactory correlation of all of the work of the normal school with the training school. Not only does the training school as a rule occupy a subordinate position in the normal school organization instead of being the pivotal point and focus of all departments, but the work of the training school seems in many, if not most, cases to be detached, to lack a fundamental relation to what is taught and learned in the classrooms "upstairs." It is no unusual thing for the normal school student to complain that the theory that has been taught to him in the courses in psychology, principles of teaching, and special methods (to say nothing of the purely "academic" courses) has no perceptible connection with the work of the training school. This is sometimes due, no doubt, to the fact that the "theory" is impracticable, and that those responsible for the practice teaching know it, and in consequence will have no commerce with it; but it is oftener due merely to a complete mechanical separation of the training department both from the department of educational theory and from the academic departments,—a separation which results in the total ignorance of each party regarding what the other is teaching or practising, if not, indeed, in actual opposition or open friction.

LACK OF COÖPERATION IN MISSOURI SCHOOLS

A striking example of this lack of coöperation between the training department and the rest of the school was revealed in the situation that existed in the school at Warrensburg at the time of the visits made in connection with the present study. A serious and long-standing cleavage in the faculty as a whole had thrown the training department and the department of education into opposing camps. Partly because of this unfortunate condition and partly because the traditions of the normal school had not granted a central position to the training department, the work of this department was completely "a thing apart," bearing no discoverable relation to the other activities of the institution. Out of fifteen teachers of academic subjects, only one reported that he had assumed any responsibility whatsoever for work in the training school, and out of eighteen teachers who were asked to express an opinion on the effectiveness of the practice teaching, ten reported unfavorably, seven did not answer the enquiry, and only one had a favorable opinion.¹

¹ Some of the replies to the questions regarding the practice teaching are illuminating:

"I am not directly responsible for the supervision of practice teaching in the subjects I teach. I do not share indirectly in such supervision. If there is any working harmony between the department of . . . and the training school, it is incidental or accidental so far as I know or believe."

"Practice teaching under present conditions is markedly inefficient, due partly to frequent changes or shifting of practice teachers, partly to conflicts of methods and ideals of supervisors and other teachers. . . . The supervisors

A sharp contrast to the condition at Warrensburg was found at Kirksville. Here the members of the academic departments had been encouraged to coöperate with the training school, with the result that six out of nineteen academic teachers reported a direct responsibility for the supervision of practice teaching, while six more reported an indirect responsibility which seemed to indicate at least an intelligent interest. With this spirit of coöperation, the responses of the academic teachers naturally reveal a much more sympathetic attitude toward the work of the school, fourteen reporting favorably, seven unfavorably, and six not replying. It is interesting to note that while the academic teachers of Kirksville were much more inclined to judge the practice work favorably than were the academic teachers of Warrensburg, the practice school at Kirksville was judged by the four representatives of the present study to be inferior to the practice school at Warrensburg, and the tests made in both practice schools¹ showed the same result. The psychological effect of making a person responsible in some measure for activities that he would otherwise be disposed to criticise may be seen in this contrast. If it be argued that there is a danger in this, it may likewise be urged that hearty coöperation, while tending to gloss over some defects, can much more easily be turned toward progress than can divided and mutually repellent interests with their jealousies and misunderstandings.

At Kirksville, however, a commendable interest in the training school on the part of the academic staff is somewhat offset by an anomalous lack of coöperation between the training department and the department of education. The head of the latter department, who himself teaches practically all of the classes in educational theory, has no official means of knowing how his theories work in practice, nor has the director of the practice school an official relationship to the work in theory. The most obvious defect of the organization at Kirksville, and the one that is doubtless chiefly responsible for the weakness of the training school as a school, lies in the lack of something that is just as important as coöperation; namely, a centralization of administrative authority. This is theoretically provided for in the office of "Supervisor of Practice Schools," which has been assumed by the president in addition to his other duties. In so far as could be determined, however, this officer fails to direct and coördinate the work of the supervisors, and the principal of the practice school, who is a director of training only by courtesy, has no authority for the purpose. Each individual supervisor is essentially a law unto himself, making his own course of study for the different

of . . . practice teaching and the members of the faculty in . . . should be in close coöperation, or the training school . . . should be under the supervision of the . . . department."

"I have nothing to do with the practice teaching. It sometimes happens that the methods in the training school and those presented in my own classes are very different."

"I am not permitted to do any such supervisory work. Of course I could visit as an outsider. I know there is no relation between [my subject] in the normal school and in the training school. I should like to attempt to relate the two but was told such is in no way my work."

"My view really is that the training school is the laboratory of the normal school. I should like to work out many things there. An entire readjustment of the relation of the training school and our normal work is, I think, vitally necessary, if we ever reach efficiency."

" . . . closer correlation and more unity between methods of academic departments and those of training-school supervisors would be of some advantage."

¹ See pages 443 ff.

grades, and determining his own standards of progress both for the student-teachers under his control and for the pupils in their classes. Coöperation of academic departments in the work of the training school is indispensable to the best work, but to turn each department of the training school over bodily to the corresponding academic department which goes its own separate way is not coöperation but dismemberment.

Kirksville and Warrensburg represent two undesirable extremes; the other schools will fall somewhere between the two as far as the organization of the training-school work is concerned. At Cape Girardeau, the head of the training department gives certain of the courses in theory, but he is not responsible for all of the theoretical work. The academic departments apparently have little interest in the training school. At Springfield, the head of the training department is also head of the department of education, including psychology, and in this way a praiseworthy coördination of the courses in theory and practice is ensured. The relations with the academic departments are also much more intelligent and cordial than at Cape Girardeau and Warrensburg. Teachers of academic subjects, some occasionally and others frequently, teach school classes to illustrate their courses in special methods; this is particularly true of the teachers who have charge of the methods courses in arithmetic and geography. So far as could be learned, however, this coöperation is informal. At Maryville, too, the department of education and the training school are under a single head, but there is no official relation between these departments and the academic departments, and the teachers of the academic subjects are apparently unconcerned as to the work of the training school.

DIFFICULTIES OF COÖPERATION

There are many difficulties in the way of effecting a thoroughly unitary organization of normal school work. Subject-matter specialists find it hard to see the elementary and secondary programs as wholes, for their own subjects naturally loom large in every view that they take; furthermore, they often lack the personal equipment and the specialized training that should characterize a good critic. As has already been said of the curricula of the normal schools, a curriculum framed for a practice school by a committee of subject-matter specialists is almost certain to be a compromise among the different claimants for time and precedence rather than a well-articulated structure in which the needs of the pupils for a balanced and unified program of instruction are the sole criteria for the selection and arrangement of materials. A second difficulty lies in the practical impossibility of administering a practice school on the committee plan. Here centralized authority, balanced by centralized responsibility, is a *sine qua non* of efficiency.

ORGANIZED COÖPERATION

The desired interlinking of all normal school departments with the training school is certainly not to be realized by turning over the practice teaching to the control

either of the general normal school faculty or of a committee representing the various academic departments. The training school must be under the direct control and supervision of an expert administrator fitted by experience and by specialized training for this type of work, and this director or superintendent must have under his immediate charge a corps of carefully selected and specifically trained critics or supervisors. The supervisory staff should include many, if not most, of the members of the so-called academic departments, and the entire group should form what might be termed a training-school "cabinet." This body should legislate upon all matters concerning the organization of the training-school curriculum and questions of educational policy; the superintendent or director, as the officer in whom administrative responsibility is lodged, should have authority to make decisions upon all matters of administration, with the provision that any other member of the cabinet may appeal from his decisions to a higher administrative authority.

A plan of this sort would ensure (1) the administrative autonomy of the practice school under a single responsible head, and (2) the responsible coöperation of all academic departments and all members of the critic staff in the organization of the school, the construction of the curriculum, and the oversight of the student-teachers. The chief difficulty in carrying out this plan under present conditions is serious but not insurmountable. It would require that appointments to all important positions in the academic departments be limited to persons who are qualified by personality, experience, and training to participate in the responsibilities that it is proposed to delegate to the members of the practice school cabinet. It would mean, in other words, that there would be but a very subordinate place in the normal school organization, or none at all, for the teacher who is merely a specialist in his subject-matter. The requirement of the special abilities needed for intelligent coöperation is after all nothing but the characteristic differentia of a professional school for teachers, and should be faced as frankly as similar restrictions are faced in all other genuinely professional institutions.

Needless to say, the relationship between the department of education and the training department should be particularly close and intimate, and to this end it is advisable, we believe, to combine the headship of the department of education and the directorship of the training department in one and the same person. The other members of the staff in education should also have definite responsibilities in the administration and supervision of the training school to the end that every class in educational theory may be in charge of a teacher who is in daily touch with the actual problems of teaching and management in an elementary or a secondary school.

(d) THE APPRENTICE SYSTEM AS RELATED TO THE UNIFICATION OF COURSES

In so far as the coördination of all courses is concerned, the Harris Teachers College stands in sharp contrast with even the best of the state normal schools. Each instructor

apparently works with a perfect knowledge of what the other instructors are doing,¹ and all instructors make a large use of the facilities which the Wyman School offers for observation and demonstration. The actual work of practice teaching, however, is conducted on the apprentice plan, the principal of the school to which the cadet is sent being chiefly responsible for the work, altho his supervision is supplemented by that of the regular supervisors of the school system. Thus a dualism quite analogous to that existing in the state normal schools is brought into existence at a most critical point. The characteristics of the system may be summarized as follows:

DEFECTS AND ADVANTAGES OF THE SYSTEM AT ST. LOUIS

1. The teachers who have conducted the courses in theory and observation are in no position to ensure the success of their students or of their theories in practice. Indeed, the principal in charge of a cadet may be out of sympathy with the ideals of the college, and the student may be quite unable to carry out in practice the principles taught there. In at least two of the elementary schools visited in 1915 and 1916, a situation of this sort was apparent.

2. The amount and especially the quality of the supervision that the student-teacher receives under this system are extremely variable. In many cases the actual supervision of the practice is delegated to the classroom teachers in whose rooms the cadets chance to be working. Altho selected for their merit, very few of these teachers are skilled in the difficult work of training beginners, and while in some cases, no doubt, the results are excellent, this fortunate outcome must be looked upon as more or less accidental.

3. Nor are the principals themselves always competent for the task of directing the beginner. Like the teachers, they vary widely, both as to their ideals of what constitutes good teaching and as to their ability to point out defects and suggest remedies. Altho in many cases, as one might infer, they do most creditable work, the apprentice must run a chance of assignment to a principal who, however good he may be from other points of view, is not a good supervisor of beginning teachers.

It may be urged that these disadvantages, even if they are admitted, do not constitute a serious indictment of the apprentice system, for after leaving the training school the young teacher will in any case run chances of working under incompetent supervision. This contention overlooks the fact that teachers who have been well started in the development of an effective technique will to that extent be safeguarded against the dangers of this incompetence. If it be granted that the supervision of beginners is a difficult task, requiring both exceptional native qualities and specialized training, it should follow that the initial practice teaching may best be undertaken under the immediate and responsible supervision of well-equipped critics who give the bulk of their time and energy to this task.

¹ When Harris Teachers College was visited, the entire faculty was in the midst of a careful review of the curriculum, topic by topic in each course. This is a periodic occurrence, and is undertaken less for the purpose of revision than to guarantee a perfect mutual understanding on the part of each instructor as to just what his contribution is to be and with what order and emphasis it should be made to take its place in the complete scheme.

The apprentice system as carried out in St. Louis has an advantage in that the freedom granted to the principals in directing the work of the cadets has led to the devising of various methods of conducting their training. The following account reported from one school suggests the plan that is generally followed:

At the beginning of the term, the cadet is sent to the first grade, and studies the organization of the school as the pupils come from the kindergarten. A week or two is devoted to this work, and at the end of this period the teaching is begun. The cadet teaches one-half of the time. The program is so constructed as to afford an opportunity to teach every subject in all grades, altho the progress from grade to grade is not necessarily consecutive. Every Friday morning the principal has a conference with the cadet, discussing the work chiefly from the point of view of method and sequence. Occasionally the cadet takes a room for a half-day, carrying all of the work during the session. This is invariably preceded by a conference with the classroom teacher in which the work is gone over carefully. On such occasions, the principal gives the cadet thoroughgoing supervision and criticism. During the last two weeks of the semester, the cadet has charge of rooms for the entire day. Lesson plans are prepared for all lessons until the principal is satisfied of the cadet's ability to plan work well; these plans are submitted sometimes to the classroom teacher and sometimes to the principal.

While the practice teaching observed in the school from which this plan is quoted was excellent, the teaching in other schools was noticeably defective, and in some cases there was apparently no attempt to correct the defects. Particularly significant was the deficiency in classroom technique of some of the beginners — a phase of teaching-skill which expert supervision can quickly influence.

SUGGESTED IMPROVEMENTS

As a result of observations in St. Louis, one is disposed to conclude provisionally that the apprentice system as the *sole* method of organizing student-teaching is not satisfactory, and that intensive training in a well-organized and expertly supervised practice school will ensure with greater certainty the formation of good teaching habits. If, on the other hand, the supervision of principals and classroom teachers could be supplemented and directed by expert critics from the college, the marked advantages of the apprentice system might be preserved and many, if not most, of its weaknesses might be eliminated. The ideal solution of the problem would provide preliminary participation and responsible practice in a school attached directly to the college, followed by apprentice work in selected schools under the joint supervision of the regular principals and of the supervisory staff at the college.

From the point of view of progress in the professional preparation of teachers it is particularly fortunate that the apprentice system has been given so thorough a trial in St. Louis. Certainly if this system could succeed anywhere, it would succeed in a well-articulated city system where the principals represent in general a high type of professional ability, where they have time and incentive for organizing the supervision of practice teachers, and where the uniformity of curriculum and textbooks

makes possible a very specific and intensive mastery of subject-matter by the prospective teacher. If the purely apprenticeship or "cadet" system falls short under these favorable conditions, it could hardly be expected to succeed if attempted on a large scale in normal schools not officially connected with the public schools to which their cadets are sent, and where it would be impossible in the curriculum to forecast so faithfully the varying elementary programs of many towns. Even in such schools, however, there would be a large advantage in the double arrangement just suggested, — the provision of preliminary practice facilities in direct connection with the normal school itself and a supplementary period of apprenticeship under the joint supervision of the normal school critic staff and the superintendents, principals, and classroom teachers of coöperating systems.

Notwithstanding these strictures upon the apprentice system as worked out in St. Louis, it is the conviction of the observers that the work of the Harris Teachers College, including its admirable system of extension courses for graduates, represents a highly efficient type of teacher-training, and deserves to stand in many ways as a model for normal schools and teachers colleges throughout the country.

(e) SPIRIT AND MORALE OF THE PRACTICE SCHOOLS

A serious handicap to the efficiency of a practice school is the difficulty of ensuring on the part of the pupils a proper attitude toward the work of the school. Pupils are not always inclined to take the student-teacher seriously, and this means that the work which the student-teacher represents is not taken seriously. The problem is not insoluble, for some practice schools are characterized by a most commendable spirit of industry and coöperation. Among the state normal schools of Missouri, for example, Springfield furnishes a striking illustration of efficiency in training-school organization from this point of view. But in some of the other institutions, conditions in the practice school at the time when the visits were made were little short of desperate. The following excerpts from the visitors' notes will indicate types of difficulty in administering practice teaching that are by no means limited to the Missouri schools:

GRADE III. A section of eleven pupils in nature study. The violet is being studied. The pupils are inattentive and disorderly. The student-teacher corrects a boy for whispering, and he responds by "making a face," meantime continuing with his whispering. The pupils are especially disorderly while the teacher is writing upon the blackboard. They whisper, talk, and tickle one another. There is no interest in the work of the class. A supervisor enters, and the class at once becomes attentive and orderly.

GRADE VI. A class in arithmetic. Blackboard work is in progress when the observer enters. At the close of the period another student-teacher takes charge of one-half of the class. There is some confusion in making the change. The new teacher is besieged by six or seven pupils, each clamoring to have his question answered first, and all talking in high voices.

Teacher: "Every one take their seats."

A lesson in history is begun; the assignment for the next day's work is given first:

Teacher: "For to-morrow, take the Dutch revolt against Spain."

Pupil (roughly): "Take *what?*"

Teacher: "The next chapter."

There is a great deal of noise and confusion, and little attention to the work in hand. The pupils open and close the desk-tops needlessly, noisily, and repeatedly; they play listlessly but noisily with pencils, and ink-well covers. When called upon they stand to recite, but rise lazily and slouch over their desks when half erect. One boy comes sauntering into the room, hands in pockets, ten minutes after the exercise begins. The pupils interrupt the recitation with irresponsible and sometimes "funny" questions. The student-teacher calls for better order, and for a time there is a slight improvement. The section includes five boys and sixteen girls; there are also in the room two normal school students who have apparently been assigned to "observe" the work.

GRADE VIII. Physiology. The section includes six girls and eight boys. The class shows little spirit for the work. The pupils tend to recite without thinking, and give other evidences of irresponsibility. There is much shuffling of feet and mumbling in undertones. One girl tries to take a pencil from a neighbor's hands; the two then smirk and giggle. Some of the pupils attempt to create merriment by making either crudely humorous or semi-impudent statements. There is a good deal of "horse-play" among the boys—such as slapping on the back, followed by exaggerated expressions of pain on the part of the one struck. The lesson deals with the problem of good health, and seems well adapted to the needs and attainment of the pupils—but they will have none of it. The bell rings and the teacher hastily gives the assignment: "For to-morrow, self-control and cigarettes."

GRADE I. A section is having a word drill (with cards) under the direction of a practice teacher. The pupils are inattentive and disorderly. The work is apparently too easy.

GRADE V. A practice teacher has charge of a section of thirteen boys in hand-work. The making of a blotter holder is the project. The teacher is giving directions to individual pupils; the remaining pupils are generally idle but not at first disorderly. It seems that the scissors are not ready and a pupil is sent for them. The order relaxes as the work proceeds. The teacher requests the pupils not to "speak out," but the request is unheeded, and the teacher answers the questions just as willingly when the pupils do "speak out."

GRADE IX. Algebra under a practice teacher (a young man). The attention is good at the outset, but the pupils rapidly become listless and inattentive as the work proceeds. They mumble in speaking and lean inertly against the desks when standing for recitation.

GRADE IV. Thirteen boys and one girl form a language section in charge of a practice teacher. The pupils are very disorderly, and not infrequently impudent. As the observer enters, one pupil is scrambling on the floor, having apparently been pushed from his seat by a neighbor,—altho the impulse of the push was quite likely supplemented by the boy himself. There is much confused talking.

One pupil tells another to "shut up." The teacher pleads, — "Boys, you must be still;" but no results follow from this admonition.

GRADE V. A language lesson. Discussion of the work of the undertaker. The class is disorderly, the pupils interrupting the teacher and one another on the slightest pretext. The teacher's admonitions are not effective.

GRADE V. A geography lesson on Montgomery and Birmingham, Alabama. Pupils chime in freely, speaking very loudly. Turmoil finally results. The teacher checks the irresponsible "guessing" of the pupils, but the class still remains somewhat turbulent.

It would be unjust to infer that all of the practice teaching involves these unfortunate conditions. One may always find at least a few practice teachers who thru native charm or good luck or both have managed to create many of the conditions that make for effective school work. But too frequently the practice school is an unruly school in so far as the practice classes themselves are concerned. In Springfield, on the contrary, and undoubtedly in certain other normal schools scattered throughout the country, the practice school is so organized and administered that practically all student-teachers are able from the outset to work with the full confidence that the attitude of the pupils will be positive rather than negative. A subtle spirit of coöperation and good will has been made to characterize the pupil-body as a whole. This is a contrast that demands further examination.

REASONS FOR LOW MORALE

Back of the unfortunate condition described there usually lurks a definite and plausible theory of preparing teachers. Modern educational doctrines, it is urged, demand that the teacher "hold" his pupils thru interest and activity rather than thru force or the show of authority. To prepare teachers to maintain order thru interest and personal leadership, the conditions of the practice class, it is argued, must involve a similar demand. As a matter of fact, a consistent effort to carry out this theory will lead inevitably to the kind of school and the kind of work pictured in the above notebook extracts. The more unfortunate tendencies of the policy may be summarized as follows:

1. The pupils are quick to take advantage of the fact that the student-teacher has no effective authority. This leads not only to slack work on their part, but also to cumulative experiments in disorder to determine how far lapses from the stated rules may be carried.

2. The teacher, recognizing the conditions but lacking personal authority to check them, is unwilling to appeal for aid to the superintendent or supervisor because of the belief that to do this will be a confession of inability to master the situation. His tendency, then, is to hide or overlook the inattention and mischief of the pupils, trusting that the supervisors will not find out how unfortunate the conditions really are,—a policy in which he is often abetted by the pupils themselves, who assume

a righteous and industrious attitude while the supervisor is present, only to drop it when his back is turned.

3. Under these circumstances the student-teacher is almost certain to become self-conscious and diffident — and at this very critical initial point the loss of self-confidence is a most serious matter. Altho expected to hold the attention of his pupils thru masterly teaching, he finds himself so overwhelmed by disciplinary troubles which the ineffective means at his disposal cannot dissolve that the first condition of masterly teaching — a genuine *rapprochement* between teacher and pupil — is never firmly established.

4. The policy in question encourages loose and inefficient supervision. Pupils may misbehave, but their misbehavior is part of the “situation” that the student-teacher “must learn to master:” it need not trouble the supervisor as one of *his* individual responsibilities. The student-teacher, lacking real authority, cannot indulge in punishments that might be complained of by pupils and parents. The school may consequently become thoroughly degenerate, while the superintendent or principal finds a safe refuge in his theory that the student-teachers must be thrown upon their own resources, and that to give them effective aid in the treatment of disciplinary problems will be to rob them of the most important educative experiences that their training can provide. This does not mean that all disorderly practice schools are in charge of lazy and inefficient supervisors, but simply that the theory of the policy stated above is too convenient not to be embraced and proclaimed by a person who is willing and anxious to shift disagreeable responsibilities and avoid irritating issues.

LAISSEZ-FAIRE POLICY A MISTAKE

The policy itself, we think, is a mistaken one. It is extremely doubtful whether the best results in the training of teachers can be obtained when the beginner is confronted with a situation, all of the problems of which must be solved at once. Far better is it to let him concentrate upon one problem,—the problem of instruction,—ensuring thru other means an effective attitude upon the part of the pupils. It should not be inferred that the student-teacher is simply to instruct the class, while a critic teacher or supervisor stands by to preserve order; the object is rather the creation among the pupils of a good “school spirit” that will be favorable toward the work of the student-teacher. As has been suggested, this is not an impossible condition to fulfil. A competent principal can develop such a spirit within two or three years’ time—even with a group of pupils who have been pretty thoroughly spoiled under a loose and ineffective régime. The welfare of the pupils of a practice school should be the primary consideration in determining the policy to be adopted in administering practice teaching,—and certainly a policy that permits children to do poor work term after term is most detrimental to their welfare. Furthermore, it can hardly be expected that a school conducted on the *laissez-faire* principle will appeal strongly to the community when the question arises of giving the normal school control of the local school system. Where this policy prevails now the citizens are fully

aware that their own schools are preferable, and no training school should demand control unless it is fully conscious of its ability to conduct practically a better school or school system than would otherwise exist.

The most unfortunate results of a procedure which prevents the development of a wholesome *morale* in a training school are the low standards of order and attainment that the young teacher is likely to have firmly fixed by the experiences of practice teaching. If the training school in effect accepts wilful disorder and scamped work upon the part of pupils as matters of course, the student-teacher is more than likely to enter the service with a similar tendency. It becomes natural for him, in judging his own work and its results, to use a standard that falls far short both of the actual abilities of the pupils and of the reasonable demands of the community. Not a few teachers who might easily stimulate their pupils to larger achievement fail to do so because they have no adequate conception of the possibilities; their pupils do as well as the pupils in the training schools that the teacher has so recently left, or perhaps somewhat better.¹ The spirit and *morale* of their schools, while leaving much to be desired, is probably no worse than the spirit and *morale* of the practice classes. Surely (such a teacher may argue) if the great state school can do no better, I should not be expected to surpass its standard.

Where normal school graduates go into well-supervised schools, the pressure of criticism is likely to bring about a speedy reconstruction of ideas,—a process which often does much to destroy the teacher's confidence in his Alma Mater, and a process the necessity for which has caused some normal schools to fall very low in the estimation of superintendents and principals who have had to make over their products. The graduate who teaches in a school that is poorly supervised, or entirely unsupervised, will miss even this corrective, and will almost inevitably perpetuate the low standards that the practice classes have set.

TRAINING SCHOOL TESTS SHOW LOW STANDARDS

The level to which practice classes may fall is clearly indicated in the results of the tests that were conducted in the Missouri training schools in the spring and fall of 1916.² In practically all of the tests for which well-established norms are available,³ the results in most of the training schools are poor. There are notable exceptions; Cape Girardeau and Springfield generally do better than the remaining schools; single grades in each of the schools make very creditable records in certain of the tests; and the standing of all of the schools in the reading tests is good. The superiority

¹A young teacher whose practice work at the state normal school had been very discouraging to her declared that in her first school after leaving the normal school there were no pupils as dull or intractable as those with whom she had been given practice work. It was found that this latter group, a small one recruited from the misfits of the city schools, actually contained a large proportion of sub-normal children. The effect of this condition upon an inexperienced teacher, especially if combined with the policy of "soft" discipline, may be imagined.

² See pages 443 ff.

³ It is true that these standards represent in the main the achievements of pupils in city school systems; but should not the state normal school aim to secure in its training schools at least the attainment of the average city school?

in reading cannot, however, be considered as counterbalancing the inferiority in the remaining subjects. In practically all of the training schools, the primary departments are decidedly better than the intermediate and upper grade departments. The fundamental work in reading in consequence is quite generally well done. The practice teacher in the primary grades also has an advantage over the practice teacher in the upper grades, for the younger children do not draw the distinction between practice teachers and "regular" teachers that their more sophisticated brothers and sisters in the upper grades are prone to make. *Morale* is a less serious problem, and the deleterious influence of poor *morale* upon the attainments of the pupils will be less noticeable.

There was little question in the minds of those engaged in the present study that the low *morale* of the practice classes was in large part responsible for the poor results. There is, indeed, a close correlation between the ranking of the training schools as determined by the combined judgment of the three observers who in 1915 examined them and the ranking as determined by the tests applied in 1916; in the case of only one of the schools (Cape Girardeau) was there a noticeable discrepancy between these two rankings. An observer will almost inevitably judge a school primarily upon the basis of its spirit as revealed in the evidences of industry, whole-souled effort, and thoroughgoing coöperation among pupils and between pupils and teachers; consequently a direct correlation between observers' ratings and the rank-order determined by objective tests is likely to mean a direct correlation between *morale* on the one hand and good results in school work on the other hand.

It is, of course, not impossible to secure good objective results when the spirit of the school leaves much to be desired. In the opinion of the observers, for example, the training school at Cape Girardeau was inferior to that at Springfield in this respect, and yet the results of the tests were decidedly better in the former school. The explanation is to be found, we believe, (1) in the organization of the training department at Cape Girardeau, which provided a system of supervision especially watchful of objective results, and (2) in the emphasis that has been given to the standard tests both in the training school and in the classes in theory.

The situation thus revealed raises an important question that has not as yet been satisfactorily answered in the discussions of educational standards; namely, How far may accomplishment as measured by the standard tests be taken as a true index of a school's efficiency? It is clear that measured performance cannot constitute the only criterion of worth; at least until the scales and tests cover a much larger proportion of the desirable results of education than do those now available. Objective measures, then, must be supplemented by the judgment of observers whose training and experience have made them sensitive to conditions that objective tests cannot yet detect. When both measures point in the same direction, an element of strength attaches to the verdict that could not be secured thru the operation of either factor alone.

(f) COURSES IN OBSERVATION AS PREREQUISITE TO PRACTICE TEACHING

Exercises in "observation" are commonly listed among the courses prescribed for the training of teachers. The requirements vary, however, both in nature and in amount in different schools. Among the Missouri institutions, Kirksville, Cape Girardeau, and Maryville make no stated requirements in observation; while much emphasis is given to this work in the Harris Teachers College and in the Springfield State Normal School. Warrensburg stands about midway between the two extremes, requiring work in observation but not giving it unusual attention.

So many criticisms have been made of the impractical and perfunctory exercises often attempted under the name of observation that successful experience with this work deserves close study. If a preliminary, concrete study of the actual procedure or technique of an art is needed anywhere, it is needed in the preparation of teachers; to send a normal school student to responsible practice teaching before he has had an opportunity to observe and study good teaching is unjust to the student, to say nothing of the pupils; it is like forcing the surgeon's instruments into the hands of the medical student who has never witnessed an operation. It will be well, then, to describe somewhat fully the way in which observation is organized, especially in the schools where particular emphasis is placed upon it.

LESSONS FOR DEMONSTRATION AT ST. LOUIS

Adjacent to the main building of the Harris Teachers College is the Wyman School, a typical elementary school of the St. Louis system, comprising a kindergarten and Grades I-VIII inclusive. The building is a large, modern structure, well suited to the needs of a school for observation or demonstration, and is connected by a covered way with the main college building. This school is used exclusively for purposes of demonstration. There is no independent course in observation, but every course offered by the college may be illustrated by lessons presented in the Wyman School; and partly perhaps because the college has no direct control of practice teaching, a very large use is made of these exceptional facilities for observation. The school enrolls over one thousand pupils, and the work is organized on St. Louis's well-known quarterly plan, which means in a large school that classes not more than ten weeks apart in progress will be available for observation at all times. This makes it possible to illustrate almost any point that may come up. The general practice is for the instructor in the college to arrange with the principal of the Wyman School and with one of the classroom teachers to have a lesson of the desired type given at a certain time. During the regular period for the meeting of the college class, the students go over and spend from twenty to thirty minutes in observing the lesson. They then return to the college classroom, where the results are discussed.

The conspicuous features of the work in observation at the Harris Teachers College are (1) its close articulation with the subject-matter and methods courses, and (2) its very careful organization. One visiting these classes gains the impression that

the work is considered by all concerned to be distinctly important. There is nothing perfunctory or formal about it. The Wyman School is in a very real sense the educational *laboratory* of the college.

COURSES IN OBSERVATION AT THE SPRINGFIELD NORMAL SCHOOL

At Springfield a separate course in observation covering a full term, five hours each week, is a prerequisite to practice teaching. It follows the introductory course in psychology and a twelve weeks course in school management. The classes in observation are differentiated with reference to the grade of teaching for which the student is preparing.¹ The course carries the same credit as do other courses meeting five times each week. In addition to the actual exercises in observation and discussion, each student is expected to do reference reading and to make out lesson plans; occasionally, too, a student is called upon to teach a class under the direction of the supervisor in charge of the class; all work in observation is under the direction of members of the training-school staff.

Observation courses at Springfield are conceived as a connecting link between theory and practice, and hold a detached and independent place instead of being woven into the fabric of the courses in subject-matter and educational theory. This is probably the only type of work in observation that can be profitably developed in a normal school with limited laboratory facilities. In a school like Springfield most of the available pupils must be reserved as material for practice teaching, and a large school for demonstration in which any instructor may arrange at any time for class exercises that will illustrate his work is out of the question under the present organization. Exercises in observation are in consequence limited to specific courses in charge of members of the training-school staff who are in a position to make the best use of the available classes. In general, whatever work the selected class is doing when the observers make their visit must serve as the basis of study and discussion. That even under these limitations the work may be made to yield good returns, the experience at Springfield seems abundantly to testify. Compared with the work at the Harris Teachers College, it has serious shortcomings, but it is vastly better than no contact whatsoever with the training school, and constitutes a distinct advance over the perfunctory exercises in observation that are not infrequently found in state normal and city training schools.

DEMONSTRATION TEACHING AT WARRENSBURG

Theoretically, the arrangement for work in observation at Warrensburg is the same as at Springfield,—a twelve weeks course preceding practice teaching and providing a bridge from the courses in theory. Practically, however, the work did not seem to

¹ Those looking forward to primary work observe for four weeks in Grades I and II, for four weeks in Grades III and IV, and for four weeks in Grades V and VI; those expecting to do upper grade work follow the same general plan except that they begin with Grade III and end with Grade VIII; those preparing for rural school teaching observe in each of the eight grades.

be so effectively organized and administered as at Springfield. This was doubtless due in part to the unfortunate conditions as to housing that confronted the Warrensburg training school at the time the visits were made. As at Springfield, the work is in charge of the training-school staff and consists primarily of lessons for demonstration given by the supervisors and the superintendent, and followed by class discussions.

(g) SUPERVISION OF PRACTICE TEACHING

From the standpoint both of the pupils' progress in the practice school and of the student-teacher's growth in skill, the amount and quality of supervision are matters of prime consideration. Along with adequate schools for demonstration and practice, an institution for the training of teachers needs a staff of well-trained supervisors and critics and a carefully organized system of directing the work of its students in training.

(1) THE SUPERVISORY STAFF

RATIO OF SUPERVISORS TO STUDENT-TEACHERS

Several attempts have been made to establish a minimal standard for the ratio of supervisors to the number of students in practice-teaching courses.¹

STATUS AND EQUIPMENT OF SUPERVISORS AND CRITIC TEACHERS

The importance of their work demands that supervisors and critic teachers rank with other normal school teachers both as to salary and professional status. This means that the qualifications demanded of appointees to supervisory and critic positions should be comparable in every way to the qualifications demanded of teachers of academic and professional subjects. They might well, indeed, be superior. It is in the relatively low status accorded to the supervisors and critics in comparison with the teachers of academic subjects that the normal schools as a group have made one of their most serious mistakes. In the study of practice teaching already referred to,² it was found that the median average salary of critic teachers in forty-six state normal schools was \$1036, while the median average salary of academic teachers in thirty-six schools was

¹ Whether a normal school has an adequate supervisory staff can usually be determined, however, only by an examination of the system of practice teaching and the system of supervision in each particular case. The extent to which academic instructors participate in the work of supervision as well as the "teaching load" of all supervisors must be taken into account. With this understanding the equivalent of one full-time supervisor to every eight student-teachers may well be accepted as a desirable standard. Judd and Parker, for example, suggest 1 : 8 as the lowest possible admissible ratio, and Kelly, writing in 1915, reports for sixty-eight state normal schools a median ratio of 1 : 14. Santee, in his study of practice teaching in seventy state normal schools, asked each school to state the smallest number of student-teachers in charge of a single supervisor and the largest number of student-teachers in charge of a single supervisor; the median in the former instance was six, with a range from one to forty; the median in the latter instance was fourteen, with a range from two to fifty. (C. H. Judd and S. C. Parker: *Problems involved in Standardizing Normal Schools*. United States Bureau of Education, *Bulletin* No. 12, 1916, page 89. F. J. Kelly: *What Training School Facilities are provided in State Normal Schools*, in *Educational Administration and Supervision*, vol. i, pp. 591 ff. A. M. Santee: *The Organization and Administration of Practice Teaching in State Normal Schools*, in *School and Home Education*, September, 1917, pages 8 ff.)

² A. M. Santee: *op. cit.*

\$1488. In the Missouri schools the salary differences are not so noticeable,¹ but the differences in training are striking; while ninety-three per cent of the teachers of academic subjects have had the equivalent of four years' collegiate education, only twenty-seven per cent of the supervisors have so extensive a background for their work.

As a matter of general policy in normal school administration, the larger the recognition and the more attractive the rewards given to the expert whose class work is to be the model for the normal school student to emulate, the more clearly will the school emphasize its function as an institution for preparing teachers. The teacher who, in addition to possessing a thorough and appropriate education, can teach and manage a class expertly well, and can successfully show others how to do it, should be placed well above the teacher of academic and professional classes who lacks this power. Such ability is the very heart and soul of professional training, and to refuse to recognize it is to ignore the very object for which the normal school exists.

(II) METHODS OF SUPERVISION

Before proceeding to a discussion of the practices in Missouri, it seems desirable to indicate briefly the forms of supervision that appear to have justified themselves in successful experience. In the better normal schools, efforts to ensure the growth of the student-teacher take a variety of forms. Lesson plans are required, and these must be approved by the supervisor before the lessons are taught. The practice classes are visited, and the work of the student-teacher is inspected and criticised. Sometimes the visiting supervisor leaves with the teacher a written criticism; at other times the two meet for a personal conference; and occasionally a supervisor will take the class and show the teacher just how a topic is to be treated or a difficulty overcome. Supervisors not only meet students individually for conferences regarding work done or in prospect, but they also meet groups of student-teachers who are engaged in similar work, while all of the student-teachers may be brought together at periodic intervals for a general conference on the work of the school as a whole. Nor are the conferences limited to those in which the student-teachers participate. In good normal schools all of the supervisors meet at least fortnightly and usually once each week to compare notes, to discuss this or that teacher's points of weakness and strength, and to agree upon methods of solving the double problem of developing the student-teacher and conserving the welfare of the practice classes. In some normal schools, too, much is made of the "critique" or exhibition lesson given by a student-teacher in the presence of his supervisors and of his fellow students, and criticised later by the group.

The organization of a machinery of supervision thru the routine of which adequate attention will be given to the work of each student obviously involves the danger

¹ Thirty-one women supervisors receive an average salary of \$1335, while forty-eight women teachers of academic subjects receive an average salary of \$1353; taking men and women together, the supervisor's average salary is \$1368, while the average salary of all academic teachers is \$1569.

lest routine become an end in itself. It is essential that the system be sufficiently elastic to prevent its hardening into a mere mechanism, and so thoroughly charged with meaning that neither supervisor nor student-teacher will ever lose sight of the purpose of any detail. It is also essential that its routine be so well established as to leave no chances open for the repetition of serious blunders, or for the continuance of conditions that are inimical to the welfare of the pupils. Some of the more important elements in this organization will be briefly noted.

Lesson Plans. The welfare of both teacher and pupils demands a careful planning of each lesson, and the criticism of each plan by a supervisor before the lesson is presented. In no other way can the supervisor be assured that the subject-matter of the lesson has been properly organized, and that the materials which the student-teacher proposes to present contain no errors. That this requirement has its dangers no one will deny; as one director of training explained: "We are afraid that the lesson plan will get in the teacher's way when he goes before his class." Certainly there is a risk that two important elements in successful teaching — spontaneity and enthusiasm — may be impaired by the process. On the other hand, while the danger must be recognized, there can be no doubt of the necessity for incurring it. The testimony of good teachers everywhere is to the effect that a painstaking preliminary working over of materials will not only not destroy one's spontaneity in teaching, but rather, because of the sense of mastery that results, will free one to do superior work. Confidence that is thus made intelligent breeds a sort of driving power beside which the enthusiasm springing from one's first uncritical interest is exceedingly superficial. The skilful supervisor, in watching the work of the young teacher, can quickly detect whether the life has gone out of it because of too close attention to the prepared outline, and this is the time for suggestions as to the proper place of the lesson plan.

Whether lesson plans should be required daily or weekly or by terms or by large topics or in any combination of these units is not so important a matter provided that some routine of effective preparation is recognized and practised.¹ The greatest care upon the part of the supervisor, however, is essential to prevent the daily planning from becoming merely perfunctory. Probably the best practice is to provide a stated period each day when supervisor and teacher may meet for a conference on the lesson to be taught, and when the teacher may go over with the supervisor each step in the proposed exercise. While these may take more time than is involved in merely reading the lesson plans and returning them with corrections and suggestions, the expenditure is a good investment, for the actual *viva voce* consideration of the problems will do more than anything else to prevent them from losing their interest. The time taken by the conferences may be reduced as the student's skill increases.

Practices and policies regarding lesson planning show considerable variation among the Missouri normal schools. At Kirksville there is no uniform system; a few of the

¹ Lesson planning may well be graded, requiring at the outset daily plans covering small units, and progressing thru definite stages to the plan that covers a relatively large unit of subject-matter, the teaching of which will occupy several recitation periods.

supervisors require plans in advance, but most of them, it seems, allow "plans" to be worked out and presented *after* the lesson has been taught! As a review by the student-teacher of what he has attempted to do in each lesson, the latter practice may have considerable value; as a substitute for preliminary planning, it cannot be considered satisfactory. Nor did the actual practice teaching observed in Kirksville justify in any way the failure to establish an effective routine of lesson planning. It was clear in some cases that the student-teachers did not take their work seriously,—a condition that the requirement of lesson plans certainly tends to correct; and the general tone and spirit of the practice school work indicated a looseness of standards which must go inevitably with lack of system.

At Warrensburg, each student-teacher prepares daily the plan for the next day's teaching. This plan is placed in the supervisor's hands before the close of the day, and is returned on the following day, just before the time at which the lesson is to be given, unless the student calls for it earlier, as he is privileged to do. This practice ensures the preparation of a plan by the student, but it does not ensure a conference with the supervisor, or, indeed, a review of the plan in time to make needed corrections.

At Cape Girardeau, an effort is made to prevent the lesson planning from becoming mechanical by discouraging plans of a too formal type. Brief, simple statements of what the student-teacher proposes to do are required in advance, usually covering three or four lessons. In the later stages of practice teaching, the requirement as to plans may be, and, we take it, usually is still further relaxed.

At Springfield, lesson plans are required of each student-teacher, sometimes a week, sometimes two days, in advance of the day upon which the lesson is to be presented.

At Maryville, daily plans are required in each case, and whenever the student-teacher is following the problem method, which is heavily emphasized in this school, an additional plan must be presented covering a unit of work. The plans must be examined and returned by the supervisor before the teaching hour. Once each week the superintendent of the training school inspects all plans.

Inspection of Class Work. The class work of the student-teacher must be frequently observed if mistakes are to be nipped in the bud. This again involves a serious danger lest the teacher become self-conscious, losing thereby both spontaneity and confidence. It is by his success in counteracting this danger that the wisdom of the supervisor is best measured; the test of the skilful supervisor is the ability to inspire his charges with a confidence in his own fairness and sympathy that will make his presence in the classroom welcomed rather than dreaded. In any case, the need of such visitation is paramount, and one of the best results of practice teaching upon the student-teacher is to accustom him from the outset to do his work free from embarrassment in the presence of other adults. To deal with immature minds in a manner that commands the admiration of one's equals is the constant distinction of the professional teacher.

Provision should be made for the visitation of each student-teacher at least once

every day. The visits need not be always for the full lesson period, altho sitting thru a lesson forms the best basis for constructive criticism, and should occur at least once each week, and oftener at the outset of the student's work. Generally speaking, this intensive supervision is the function of the subject-matter supervisor, who in every case should be either a member of the corresponding academic department of the normal school, or in close touch with it. The grade supervisors or critic teachers, the principal of the training school, and the director of the training department should share in supervision, assuming responsibility especially for safeguarding the interests of the pupils; for this purpose the shorter visits will often be sufficient.

The general impression of the observers was that the student-teachers in the Missouri normal schools were not visited frequently enough by their supervisors. In the course of many visits to practice classes it was rarely that a supervisor was either found in the room or seen to enter during the period of the visit. An exception should be noted in favor of the primary departments. In practically all of the institutions, the practice teaching in the lower grades seemed to be much more carefully and closely supervised than the teaching in the intermediate and upper grades. Particularly commendable in this respect were the primary departments at Kirksville, Warrensburg, and Maryville. At Springfield, the supervision of all of the grades appeared much more effective than in any of the other schools.

Conferences. Stated provisions for conferences are important features of a system of supervision, but these may be overdone also. For improving practice teaching, the stated but informal conference between the supervisor and the individual student-teacher should have the greatest emphasis. Next to this in importance is the "general" conference of the principal or director in which all of the student-teachers and supervisors are brought together chiefly for the purpose of developing an effective *esprit de corps*. Here the needs and policies of the school as a school for children rather than as a laboratory for teachers should be the centre of attention, and the conference should become analogous to the "teachers' meetings" held by the capable superintendent of a public school system. The feeling upon the part of each student that he holds to the practice school the same responsible relationship as he will later hold to the school in which he serves for pay, often stimulates the kind of effort that makes for rapid growth; to kindle this feeling of responsibility is a prime function of the head of the training school, and it is thru the general conference that he may most directly promote this end. Conferences of this sort should not be held too often, for they are essentially "inspirational" in character; perhaps once a fortnight is sufficient. Group conferences of primary teachers, intermediate grade teachers, and upper grade teachers, and conferences of teachers of English, arithmetic, history, and other subjects are important. In some schools, however, the number of interests demanding conferences is so large that the student-teachers are overwhelmed with these engagements, and time and energy which they could more profitably give to intensive preparation for their teaching are exhausted. Certainly a policy that would consider group

conferences as an acceptable substitute for intensive classroom supervision coupled with individual conferences would be most unfortunate.

The conferences of supervisors regarding the work of the student-teachers and the condition of the school as a whole, on the other hand, are of the very greatest importance. All supervisors who oversee the work of the same teachers should meet together at least once each week, under the chairmanship of the director, to coördinate the different agencies of supervision; and meetings of all of the supervisors, constituting what has been referred to above as the "training-school cabinet," should be held at least once each fortnight to consider the work of all student-teachers and the general condition of the school.

The requirements for conferences in the Missouri normal schools are in brief as follows: At Kirksville, the chief emphasis is laid upon the individual conference, for which there is apparently no stated time. General conferences, according to the principal of the training school, are not held, and group conferences are held only occasionally. At Cape Girardeau, the primary supervisors confer with the student-teachers two or three times each week. These conferences are chiefly individual, altho an occasional group conference is held. The superintendent of the training school holds a general conference with the student-teachers once a week; the supervisors generally attend this conference; the discussions are commonly confined to school management and organization, and to the phases of teaching that affect particularly the "personal equation." During the first part of the year the superintendent meets all of the supervisors each week in conference.

The conferences at Springfield seem to be much more elaborately organized. Each supervisor meets almost daily with each student-teacher under his supervision, and at least once each week he also meets his group. A general conference is held every fortnight. At each of the group conferences a member of the cognate academic department is commonly present; at the general conference it is customary to have some one not connected with the school address the student-teachers. There are no stated and regular meetings of the supervisory staff, but the superintendent confers daily with the various supervisors as individuals.

At Maryville, also, the conference plays an important part in the supervision of practice teaching. Each day the supervisors have two individual conferences with the student-teachers, one before the lesson for the criticism of plans, and one after the lesson for a discussion of the actual work done. The director of the training department meets all of the student-teachers four times each week. Regular assignments for reading are made, and recitations and examinations are demanded. Class management, the technique of teaching, discipline, the administration of the small school, the state course of study, and similar topics were parts of the program of this general conference during the term when the school was visited. This practice goes far beyond the ground proposed in the preceding pages for the general conference, and really becomes equivalent to the course in the technique of teaching and manage-

ment that was proposed in an earlier section.¹ In addition to these four weekly conferences, the principal of the school meets all of the student-teachers and supervisors once each week in a teachers' meeting at which the general policies of the school are discussed.

Testing Results. The supervision of teaching—whether practice teaching or “regular” teaching—cannot proceed effectively unless an intelligent effort is made to check the results of the teacher's work as measured by the growth of pupils. It is in terms of such growth that the outcomes of teaching must ultimately be evaluated, and the young teacher should be accustomed from the outset to think of his work as measured finally by this standard. The teacher, like the novice in other arts, grows most rapidly under the stimulus of responsibility, and the responsibility for securing definite results cannot be impressed too early or reiterated too often.

The efforts to improve practice teaching, then, are not to be limited to the criticisms and suggestions which the supervisor makes to the student after his visits to the practice class. Indispensable as they are, these cannot tell the whole story. They are concerned primarily with immediate classroom happenings,—with discipline, questioning, illustration, the stimulation of thought, the accuracy of the information imparted, and the like. All of these are means to an end, and the end, obviously, is the pupil's growth. An exclusive emphasis upon the means will tend to prevent a proper perspective upon the problem as a whole,—will tend to exaggerate means into a simulacrum of ends. In all effective supervision of teaching, therefore, the efforts of the supervisor must be supplemented by objective tests that will determine the growth that the pupils have made under the teacher's direction.

Program of Studies. Teaching cannot be tested or evaluated in terms of the pupil's growth unless the direction and nature of the desired growth have been previously determined. There must be a definite program of attainments, so to speak, which shall be both a guide to a teacher's efforts and a standard against which to measure his achievements. This program of attainments is usually called a “course of study;” but since a well-articulated program is commonly made up of coördinated courses of study, it may be better designated as a “curriculum.” Whatever it may be called, this program is an indispensable part of every school, and the practice school is no exception.

Two questions arise as to the program of studies in a practice school: (1) Who should be responsible for its construction? and (2) How closely should it resemble the programs usually found in the schools in which the graduates of the normal school may be expected to teach? One's answer to either of these questions will depend largely upon the attitude that one takes toward a much more fundamental question of policy in the organization and administration of institutions for the preparation of teachers, namely, In how far should such institutions assume the responsibility for initiating and promoting departures from existing educational practices?

¹ See page 190.

The significance of this fundamental question may be made clearer by reference to two types of teacher-training schools, each of which is represented among the Missouri institutions. The program of studies in the Wyman School of Harris Teachers College is determined in no way by the college itself. It is the standard and uniform "city course of study," adopted by the board of education upon the recommendation of the superintendent. The program of studies that guides the cadets in their apprentice work is this same course of study. In sharp contrast with the Harris Teachers College in this respect stands the elementary school of the University of Missouri, which is frankly an experimental school, altho used to some extent for both observation and practice. The course of study at this school represents a practical attempt to transform the whole system of elementary schooling, and is as unlike that of the average elementary school as could well be conceived.

The state normal schools, generally speaking, fall between these two extremes. Springfield more closely resembles the Harris Teachers College in that the first eight grades of the training school follow the state course of study, and consequently embody the type of elementary school work which the graduate of the normal school will do when he enters actual service. The policy at Kirksville, on the other hand, more closely resembles that of the university elementary school, in that little or no emphasis seems to be placed on the coördination of the practice school program either with the state course of study or with the elementary programs found in the neighboring district. Indeed, at the time of the visits made to Kirksville, the practice school was without a printed "course of study," and there was no evidence even of a syllabus in manuscript. Each supervisor, it seems, prepared his own course. At Cape Girardeau no use is made of the state course of study, but a fairly typical elementary program is published in the annual catalogue, and the statement of the aims of the training school includes the following: "To conduct an elementary and high school according to the principles known to be sound through the experience and research of leading educators." This seems to indicate that the school is not intended to be experimental in its purposes, altho the superintendent stated to one of the visitors that the course of study in the training school is "always in the making." At Maryville, the state course of study is not used. The program for the training school had been prepared apparently by the training-school staff, and represented radical departures from the elementary programs in common use in the district.

SHOULD THE PRACTICE SCHOOL EXPERIMENT WITH THE CURRICULUM?

From the point of view of the initial efficiency of the normal school graduate when he enters actual service, the policy which fits the training-school program of studies as closely as possible to that of the public schools is clearly to be preferred. From the point of view of promoting educational progress, it is equally clear that this policy may have an unfortunate tendency to perpetuate the *status quo*. The question, therefore, as to the responsibility of the normal schools for the improvement of the program

of studies in elementary schools in addition to imparting skill to prospective teachers in these schools becomes one of fundamental significance.

The question is a perplexing one. From all that can be observed, it is safe to say that the leadership of the normal schools in effecting marked changes in the elementary program of studies has been practically negligible except in one or two notable instances. Many practice schools have made radical departures that apparently have had not the slightest influence upon the public schools to which they have sent their graduates as teachers. A plausible explanation of this condition lies in the fact that the tenure of the average elementary teacher, even if he be a normal school graduate, is so brief that the curriculum policies represented by the training departments have little opportunity to find lodgment in the public schools; programs of study in towns and cities are not usually revised at the instance of young and inexperienced teachers. These facts constitute an argument against the assumption by the normal school of responsibility for this phase of educational progress, especially when, as seems to be the case, it is inconsistent with ensuring the highest possible efficiency of its graduates in the local schools. Again, it cannot be denied that many instances of "progressive" policies in constructing training-school curricula are based either upon an unreflecting acceptance of spectacular proposals, or upon a superficial acquaintance with really desirable reform programs resulting in their misinterpretation and distortion. In either case, the practice school becomes in effect a "freak" school, the vagaries of which are the laughing-stock of competent superintendents, who may, nevertheless, be willing to take the more capable graduates with the expectation that they can readily be readjusted to another system.

Many of these difficulties will, of course, be overcome and the underlying evils corrected with the stabilizing of educational theory. But even under better conditions, it would seem inadvisable for the normal school to attempt, thru its practice school, both to train teachers how to teach and to demonstrate to the public schools innovations in the subject-matter of instruction. For experimentation in education and for the demonstration of every well-matured proposal, there should be abundant opportunity, and normal schools that are adequately supported should be encouraged to assume an important leadership in that type of educational progress which is represented by curriculum reform. But this phase of their work should not be confused with their primary duty of training inexperienced practitioners. A normal school may well have its experimental school with its staff of trained experimenters; but the practice school should not be an experimental school, in part because the decision regarding the value or worthlessness of this or that innovation should not depend upon what student-teachers can do with it, and in part because the student-teacher can be made most efficient for his proximate duties when he deals with the same kind of materials that he is likely to deal with in his actual teaching service. The practice school, in short, in so far as its curriculum is concerned, should represent the best *approved* conditions. This does not mean that it should limit itself to the stand-

ards of the median or average public school of its district; it means rather that it should not reflect a type of educational material that the graduates in all probability will never be called upon to teach, and readjustments from which in their first teaching will inevitably cause confusion and inefficiency. This, of course, should not preclude an open-minded attitude upon the part of student-teachers toward new departures; certainly it should not exclude the trial by them of various methods of teaching; "experimentation" of the latter sort should be encouraged. There is, of course, a vast difference between testing various methods of presenting subject-matter and attempting to test widely varying types of such material.

For a state normal school like Springfield to use in its training school the state course of study is a most excellent policy. In some states, however, the central departments of education do not publish official syllabi for the elementary schools, and in other states the published outlines are adapted particularly to rural school conditions. Often a curriculum must be constructed independently, and even when an outline prepared by an outside authority is used, it will probably be well to modify it to some extent to meet the legitimately peculiar needs of a practice school. Some authority in the normal school, therefore, should be responsible for the training-school curriculum, and this responsibility may best be lodged in the training-school cabinet, composed, as has been suggested, of the critic teachers and supervisors including representatives of academic departments, acting under the chairmanship of the director of training.

(h) CONCENTRATED *versus* DISTRIBUTED PRACTICE TEACHING

In a majority of the state normal schools of the United States, the work in practice teaching is "distributed" in the sense that the student teaches for one period each day, carrying other normal school courses at the same time, all of the work, including the practice teaching, usually constituting a full program. In other words, the student's energies during the period of practice teaching are distributed among a number of stated engagements and activities of which the actual work in teaching is only one. In a respectable minority of schools the practice teaching is "concentrated" in the sense that, during the term, semester, or year devoted to this work, it constitutes the sole or at least the chief business of the student.

There are advantages and disadvantages in each type of organization. Other things being equal, the "distributed" practice teaching permits the extension of practice over a longer period of time, an arrangement that is thought to be favorable in view of the fact that in the acquisition of skill a wide distribution of learning periods generally brings better results than their concentration. This has been experimentally demonstrated for certain types of skill, and authorities in educational psychology have not hesitated to generalize these particular instances into a principle that is favorable to distributed learning in all fields where skill is the desired outcome. It is hardly likely, however, that the psychology of learning has been a potent factor in the es-

tablishment of the system of distributed practice; the major reason for its endorsement has been its administrative convenience. Distributed practice permits the student's programs to be arranged with the course in practice teaching upon the same basis as the other normal school courses; and when a considerable proportion of the teaching in the training school must be done by student-teachers, the system gives a better opportunity to ensure a sufficient number of teachers at all times during the year. Moreover, for similar reasons, an elective system, with its emphasis on academic subjects in preparation for the university or out of consideration for men students, finds the distributed system preferable to one that places practice in the high light of a full term's concentrated attention.

On the other hand, distributed practice involves a very serious danger either that the preparation for the daily teaching will be neglected because of the claims of other courses, or that the legitimate demands of other courses will be neglected because of the pressure to do good work in teaching; as thus administered, practice is but one of four or more not necessarily related obligations, whereas it should be the focus of all the candidate's earlier preparation and the absorbing centre of all his present interests. In short, the theoretical advantages of distributed learning may, in the case of practice teaching, be more than offset by the obvious disadvantages of divided attention. Skill should certainly be one of the results of the work in practice teaching, but it is not the only outcome desired; insight into child nature, mastery of subject-matter taught, sensitiveness to unhygienic conditions and to symptoms of disorder—all of these and many other factors are sought in addition to specific habits. The performance for an hour each day of a single, isolated unit of classroom work is qualitatively a totally different experience from that involved in concentrating one's full energy and attention on the life of a class for a whole day or a half day, and having every additional exercise planned with a view to the illumination of that one intensive study. It cannot be doubted that many students who now slip thru with a fair average for all subjects by the distributed plan, would fail ignominiously if required, as they should be, to stake everything on their performance in this searching and selective test.

In mastering telegraphy, typewriting, and the other arts from which the experimental conclusions concerning the value of distributed learning have been mainly derived, it is the habit side which is important; one practising typewriting does not have to prepare laboriously for each practice period, and the factor of distraction thru the pressure of other duties scarcely affects the development of desirable habits as it does in teaching; nor does the practice of typewriting involve anything akin to the mastery of subject-matter and the understanding of child nature that teaching involves. In teaching children, a habit that is of any value must be accompanied by insights that may be had only by saturation, as it were, in the experience itself when directed and explained by those to whom such insights are real. Perhaps the chief indictment of the system of distributed practice is its effect upon the pupils of the

practice classes. Their interests alone would seem to demand that the work of teaching be the primary interest of the student-teacher to the ends (1) that he may make the best possible preparation for each day's work, and (2) that the distraction of the practice classes thru the frequent changes of teachers during the day be reduced to a minimum.

Among the Missouri institutions, the concentrated system of practice teaching finds a place only in the Harris Teachers College, where, as has been pointed out, the student spends his third half year as an apprentice in an elementary school, giving all of his time and energy to this work. The practice teaching in the state normal schools is everywhere upon the distributed basis,¹ and this is doubtless one explanation of the generally unsatisfactory character of the practice teaching in most of them.

(i) MOST FAVORABLE POSITION OF PRACTICE TEACHING IN THE CURRICULUM

Practice teaching is usually placed in the last year, semester, or term of the student's residence at the normal school. In St. Louis, as has been pointed out, the third semester of the two-year curriculum is given over to apprentice teaching, leaving the fourth semester for the courses in history and theory of education. This plan, while most commendable from the point of view of accepted educational principles, is quite unusual in normal schools and city training schools. Those in charge of the work are naturally reluctant to commit the pupils of the training school to the care of student-teachers before the latter have had the advantage of all of the academic and professional instruction that it is possible to give. With the development of three-year and four-year curricula it would be thoroughly practicable to arrange the courses in such a way that a final term or semester could be devoted to a type of work designed to summarize and interpret the results of the preceding courses in the light of fundamental principles. The large advantage of this arrangement lies in the fact that the student's work is rounded out; he is left with a body of theory that aims to organize and systematize the details that have gone before, and also to provide a background for later growth.

It would be a mistake, however, to limit the student's active contact with the training school to the period of his responsible practice teaching. As soon as possible after his residence at the normal school begins, he should be introduced to the actual problems of teaching, partly, as we have suggested, thru systematic observation closely correlated with subject-matter courses, and even more intimately thru the type of training-school work that has been called "participation." This may sometimes in-

¹ The following excerpt from one of the many reports from normal school teachers gives a clear picture of the situation from within:

"Concentrated practice teaching was the theory in the school here to some extent even when you were making the survey; it had fuller sweep a year or two earlier. It was administratively impossible with the wide elective privileges accorded to students. Further, adequate supervision could not be provided with the funds available, and many of the candidates for diplomas were hardly capable of making adequate preparation for an entire day of teaching work. Scattered through a rather wide list of electives their failures were less apparent, tho doubtless not less real."

clude, as in the plan developed at the University of Wisconsin, taking a place as a pupil in one of the classes, preparing the lessons, and being ready at any time either to "recite" as a pupil or to exchange places with the regular teacher. Participation of this sort will generally be limited to the more advanced training-school classes. Besides this, there should be a period of active service as a helper or assistant to the regular teacher, especially in matters concerning class routine, coaching individual pupils, preparing materials, accompanying classes upon excursions, and arranging for dramatic festivals, together with some measure of responsible oversight of recess and play periods in connection with active participation in the smaller children's plays and games, or in the older pupils' athletic contests.

The aim of this active participation in the work of the training school would be twofold: first, to keep the student from the outset in the closest possible touch with the problems that he will have later to face as a teacher; and, secondly, to prepare him gradually for the more exacting responsibilities of the practice class.

Work of this sort has not been highly organized in any of the normal schools or city training schools of Missouri, nor indeed is it at all common in the normal schools of the country at large. Its value is so obvious, nevertheless, and the results of introducing it wherever it has been carefully organized have been so favorable, that the general plan may be heartily commended. The most serious difficulties in the way of such procedure are to be found in the meagre laboratory equipment of most of the normal schools. This is an additional reason for insisting that every normal school should have under its control a sufficient number of the local public schools to ensure adequate facilities for all varieties of practical work.

c. COLLEGIATE COURSES IN SPECIFIC METHODS OF TEACHING

The term "special methods" has been used in American normal schools by way of contrast with "general method" to designate courses that deal either with the actual technique of presenting different subjects, or with the specialized problems involved in teaching pupils at different levels of advancement. Thus we find, on the one hand, methods courses in arithmetic, grammar, geography, English, and similar subjects, and, on the other hand, courses in primary methods, intermediate grade methods, high school methods, and the like. Not infrequently the specialization has reference both to the subject-matter and to the level upon which it is to be taught; for example, methods of teaching reading in the primary grades, or methods of teaching history in the high school. In some schools, too, a distinction is made between "methods" courses and "courses in the teaching of" this or that subject, the former term referring to elementary school subjects, the latter to high school subjects.

In theory these courses in specific methods of teaching are usually conceived as involving an explicit application of the principles developed in the more general courses, particularly psychology, "general method," and the principles of teaching,—

an expression of the same belief in the validity of a strictly deductive procedure that has hitherto characterized in general the construction of curricula for the preparation of teachers. In practice, however, the "special methods" courses have tended to be quite empirical. Sometimes they are simply subject-matter reviews, with a few suggestions from the instructor as to approved or disapproved methods of presenting this or that topic to elementary classes;¹ sometimes they touch but lightly the content of the subject, and lay their chief emphasis upon the principles of classroom technique, especially in connection with such problems as the recitation, questioning, teaching pupils how to study, and the like;² and still another type of course treats not only the actual teaching of the subject, but also its historical development and its place in the general scheme of education.³

The normal school graduates who were asked to rate the professional courses of the normal school in the order of their value in teaching placed the courses in special methods first of all, and university graduates gave special methods courses the same preference.⁴ In view of the variations in these courses, it is impossible to determine from the replies to the questionnaire just what type of work in the study of specific methods of teaching is of most worth, but one may hazard the opinion that the courses that emphasize careful study of the subject-matter to be taught and the best methods of presenting it to elementary pupils are those that have the largest practical value. This would be particularly true where the normal schools have failed to provide courses in these subjects in their advanced curricula, for in such cases acquaintance with the actual content of one's future teaching is limited to these courses in special methods.

¹ The following outline, for example, was submitted for a course (of collegiate grade) in the *teaching of English in elementary schools*: Themes, 10 in all: Description, 2; Narration, 2; Exposition, 4; Argumentation, 2. Prepared recitations: Description; Exposition; Argumentation; Diction: Unequivocalness, Precision, Familiarity, Logical conformity, Functionality, Idiomatic usage, Repetition, Tone, Vigor, Beauty.

² While there are in the normal schools a few instances of special methods courses that overlap the general courses in school management and the technique of teaching, the most pronounced instance was found in one of the teachers' courses in the University of Missouri where, among other topics, the following were given a large emphasis:

1. The importance of well-organized classroom work. 2. The recitation, its character and aim; problem viewpoint. 3. The study of the new lesson and its importance; teaching. 4. The assignments; home work and school work; reading. 5. Attention, interest, and good order in the class. 6. Special problems connected with classroom work.

On the day when the class was visited, the instructor spent most of the hour in dictating directions for students' observation of high school work. Twenty-three specific rules for observation were stated, no one of which had especial reference to the teaching of the subject, but all of which were concerned with general problems of classroom technique.

In a class on the teaching of history in one of the normal schools, the instructor's lecture followed the subjoined outline: 1. Supervised study. 2. Home study: (a) Have a regular place for study. (b) Have a regular time for study. (c) Use the will power in holding the mind and hand to the lesson. 3. Rules for getting a lesson. (Six rules were dictated, no one of which had especial reference to history.) 4. What to do in supervised study. (Five suggestions were dictated, one of which had a direct reference to history.) 5. Test of supervised study in history.

³ A good example of a course of this type is furnished by the following outline (a twelve weeks course in special methods in history, offered in one of the normal schools): 1. Aim of history. 2. Historical material. 3. History in German, French, English, and American schools. 4. The teacher's qualifications. 5. The organization of facts. 6. Methods of teaching. 7. The course of study. 8. Observation lessons in all of the grades given from time to time as needed in the course of the work under Topic 7. 9. Several lessons on the teaching of civics as presented by Bourne, the Committee of Eight, Hinsdale, Hill, and the Committee on Social Studies of the Commission on the Reorganization of Secondary Education. 10. Special reports.

⁴ See page 442.

GOOD SPECIAL METHOD A FUNCTION OF SUBJECT-MATTER COURSES

If the position taken in the preceding sections of this report is valid, the normal schools of Missouri should give a much larger place than they do at present, not to detached courses in "special methods," but rather to subject-matter courses that will deal in a thorough manner with the materials that the normal school students will later teach. A comprehensive course in arithmetic, or in upper grade literature, or in intermediate grade geography—a course adapted to the capacities and attainments of collegiate students—should furnish, from the point of view both of subject-matter and of method, an adequate, if not an ideal, equipment for teaching the subject. According to this plan, subject-matter courses when thus thoroughly "professionalized," may well constitute the basis of each curriculum for the preparation of teachers, and the illogical abstraction of "method" from the subject-matter to which it pertains may in this way be largely eliminated. This does not mean that subject-matter courses should be limited to the materials that will appear in the later teaching-programs of the student, but the first care should be that such materials are amply provided for. If curricula are specialized as was suggested in an earlier section,¹ the subject-matter can be covered very minutely and yet with fulness; and interpretations can be added that will ensure courses of exceptional value to the teacher.

"CURRICULUM" COURSES

There is one type of "special methods" course, however, for which there will still remain a place. While "methods in arithmetic," "methods in grammar," "methods in geography," and similar titles should in time disappear from the catalogues of the normal school, replaced largely by "arithmetic," "grammar," "geography," and so forth, there should be courses that will definitely aim to coördinate all of the materials proposed for each specialized field. In most normal schools one now finds courses in "primary methods," and occasionally courses in "intermediate grade methods," "junior high school methods," "methods of high school teaching," and "rural school methods," each intended to unify in some measure the different types of work attempted on these various levels. Such courses represent the nearest approach to "special methods" courses that would be needed if the entire curriculum were professionalized. With subject-matter courses organized as their appropriate method of exposition requires, these other courses would become essentially studies in the adaptation and sequence of this properly organized subject-matter to a particular age or condition of childhood—curriculum courses, as it were, within the individual subjects themselves. Under the plan of differentiation proposed in an earlier section,¹ each of these curriculum courses would be in one sense the central course, the keystone, of a specific curriculum.

¹ See pages 148 ff.

d. COURSES IN ACADEMIC SUBJECTS

The normal schools of Missouri were designated in an earlier section as of the "academic" type. From whatever point of view they are examined, one cannot fail to be impressed by the very slight difference in apparent aim between the work done in the normal schools and the work done in non-professional schools and colleges of similar grade. This policy is commonly justified on the ground that these academic subjects, while apparently the same, are taught in a way that differentiates them from corresponding courses in institutions of general education by revealing clearly their intimate relationships to the more elementary subject-matter and to the problems of teaching in the lower schools. The present section will examine very briefly the validity of this argument, especially in so far as it rests upon the assumption that the academic courses are clearly differentiated upon a professional basis.

(1) ENGLISH AND PUBLIC SPEAKING

The most striking feature of the normal schools' offerings in English¹ is their number and variety. In three of the schools, the English courses alone could engage a student's entire time for more than two years. Indeed, if we include the few secondary courses, they actually contemplate a larger amount of work in this subject than is offered by the University of Missouri.²

AMOUNT AND VARIETY EXCESSIVE FOR SOUND CURRICULA

One may infer from the list of courses that collegiate work in English is designed primarily to prepare high school teachers of this subject. But it is reasonable to ask whether this professional objective could not be attained much more effectively by making specific curriculum requirements.³ No prospective teacher of English can take all of the courses offered in any one of the three schools even during a three-year or four-year attendance. It would seem both feasible and economical, therefore, to reach an agreement as to what a teacher of English most needs in the way of academic equipment in the subject rather than to overburden the program with elective courses, some of which are certainly of less value than others for the purpose in view. The limitations of the teaching staff would also dictate a restriction of the offerings. The "load" upon the four or five instructors in the English department of each of the normal schools is much heavier than appears, for some of the courses are necessarily repeated two, three, or even four times each year.

If any advantage inheres in the policy of preparing high school teachers in the normal schools, this advantage can be best expressed in the provision of real curricula directed toward definite teaching-objectives. The colleges and the universities

¹ See page 406.

² The total annual offerings of the English department in the University of Missouri aggregate ninety-one semester hours. This includes, as in the normal schools, the courses in public speaking.

³ Variety might be justified by many different curricula were not students with widely varying objectives registered for the same courses.

do not supply such curricula. The universities, particularly, find the elective system administratively expedient largely because selections can be made from the various offerings to meet more or less satisfactorily any one of a number of objectives. The English department, for example, must teach English to the prospective lawyer, the prospective journalist, the prospective engineer, and the prospective physician (to name but a few of the vocations that its students will enter) as well as to prospective teachers. From the point of view of educational efficiency, it could do each job better if courses could be organized that would be specifically directed toward each calling, but this is not generally feasible in such institutions.¹ The situation in the normal school is quite different. It is preparing for one profession, or at most for related subdivisions of one profession. It has the strategic advantage of being able to concentrate upon its problem or upon its limited number of related problems. In Missouri, the normal schools have not risen to this opportunity. The avowedly undertaking to prepare high school teachers, these schools are satisfied to imitate the practices and policies of the colleges and universities,—practices and policies that, in so far as the training of high school teachers is concerned, certainly constitute a misguided leadership.

PROFESSIONAL CHARACTER NEGLIGIBLE

The contention that these academic courses are appreciably modified in the normal schools to meet a professional need is not borne out by the best available testimony,—the testimony, namely, of the instructors themselves. On the question blanks submitted to the instructors in the normal schools in connection with the present study, this request appeared:

“Point out definitely the nature and extent of the pedagogical element in the course; that is, just what and how much you do in the course that you would not do if the students were not intending to teach. State, if possible, the relative proportion of time devoted to pedagogical as compared with academic work.”

In a small minority of reports there are suggestions of differentiations with reference to the professional purpose. A very few of these are definite and indicate that the instructor has deliberately organized his work with the needs of prospective teachers in view. For example:

“Considerable attention is given informally to the problems of teaching reading and elementary public speaking in rural schools and the grades. The entire method of the class is planned for helpfulness in teaching similar work to more elementary students.” (Course in *Oral English and American Literature*.)

The following replies, however, are typical of the attitude of three-fourths of the teachers of English and American literature:

“The course is chiefly academic. Possibly more attention is given to the selection

¹ Altho in some universities, the engineering colleges have insisted on specialized courses for their students in such subjects as English and mathematics.

and grouping of material than would be given ordinarily. In other respects it does not differ in method from the courses usually planned for students who have no intention of teaching." (Course on *American Poets*.)

"I should probably do the same kind of work, the ability of the students being the same, were I teaching in any other kind of an institution." (Course in *Shakespeare*.)

"To cover the ground, the course must be mainly academic. Time is lacking for more than minor mention of the methods and suitableness of teaching and subject-matter respectively. But there is a required course taken by these students, the teaching of literature, that covers the pedagogical side of the question." (Course in *American Literature*.)

"Pedagogy in this course is incidental — only so far as proper methods are employed by the teacher is pedagogy exemplified with occasional reference to why a certain method of development was employed and wherein further amplification would be necessary with younger pupils." (Course in *Literature* offered to candidates for Rural Certificate.)

"Only incidental work of a pedagogical nature." (Course in *English Drama*.)

"No special pedagogical work. The aim is to present a method of literary study and a knowledge of the period covered." (Course in *Wordsworth*.)

"The only direct pedagogical element is the discussion of suitable modern literature to introduce into the school course, the library, etc." (Course in *Recent and Contemporary Literature*.)

"The course is almost entirely academic. Of course, the feeling that most of the class will be teachers modifies the nature of the instruction to some extent." (Course in *English Literature*.)

The reports from teachers of composition and rhetoric are of the same negative tenor, — "Course entirely academic;" "Pedagogical element incidental;" and so forth. But again, in a small minority of the cases, one comes across suggestions of a definite sort, as the following:

"I seek to secure the habit of ascertaining the cause of all errors and the reason of all effectiveness in composition or speech. I seek also to emphasize fundamental principles in terms so simple and clear that they can readily be transferred to very elementary composition instruction."

An opinion that is probably more general among teachers of academic subjects than the statements in their replies indicate is frankly expressed by an instructor in English composition; the italics are ours:

"*I can hardly be so foolish as to spend a part of my time giving the training and part showing how to give it to others.* I expect that the students who expect to teach composition will make careful note of the methods and practices of this course. I do give the students considerable training in grading each others' themes, but that ought to be done in any theme course, and is done in most university courses in composition."

HOW SHOULD CONTENT COURSES BE PROFESSIONALIZED?

There is, undoubtedly, a firm conviction on the part of many teachers that subject-matter and methods must be separated, the latter following the former in every case. According to this point of view, an attempt to do the two things at once is to incur the risk of divided attention with the probability that neither will be done well. This is, of course, a danger to be avoided. It is probable, however, that those who take this view have an exaggerated idea of what "method" is. Mastery of method in a given material is after all little more than a clear consciousness of the way in which the material shapes itself most advantageously to the learner. There should be, therefore, no question of teaching subject-matter and methods simultaneously as diverse objects of attention; it is rather a matter of utilizing the actual experience of the student in learning in order to throw light upon his later problem of teaching. Certain pedagogical problems may well be relegated to methods courses, — or preferably to what were referred to in the preceding section as "curriculum" courses, — but the large problem of organizing the subject-matter for teaching and of indicating the points at which the teacher's emphasis must fall can in general be solved nowhere so well as in the subject-matter course itself. Whether it be a "review" or a "new view," the student's experiences in learning or relearning will form the best concrete basis for an understanding of the special "pedagogy" of the subject. While these experiences are fresh, they should be studied and discussed to the end that they may be registered in the student's mind and be subject to recall when he himself essays the teacher's task. Thus his whole education sensitizes him to the learning process; it is not too much to say that the skilful teacher is one who can recall most clearly the successive steps of his own mastery and thru these reconstruct in imagination the situation which the pupil is facing. The teacher who cannot do this is the teacher who is likely to leave out essential stages in instruction and then to charge up his failure against the stupidity of his pupils. It is just this power of recall and of self-analysis in fresh learning that explains the humility and sympathy of the learning teacher as contrasted with the mental snobbery of the teacher who does not insist that he himself from time to time attack strange and difficult material. To be sure, his own experiences with subjects that cause his students difficulties gradually fade unless thoroughly studied and rationalized at the time, but the all-essential attitude of the learner must be maintained if he would really teach.

The instructors in reading and public speaking seem to detect and use the opportunities for this type of training much more frequently than do the teachers of composition and literature. We find, for example, these interesting illustrations in their replies:

"Students are called on for comment and criticism of the work of others. The standards of criticism are discussed. The psychological foundation of oral interpretation is discussed and illustrations given by the teacher. This is applied in the later work of the class: when an error is made, some member of the class

is given the opportunity to try to get the right interpretation; —by means of question and suggestion giving the right mental stimulus to the reader. About one-fourth of the term is given definitely to the pedagogical element in the work. More pedagogical work is done incidentally; that is, attention is called to method pursued in obtaining a certain interpretation; this is done in passing." (Course in *Expression*.)

"Questions for debate are chosen to meet the needs of high school teachers. How to organize societies in debate, how to judge results, how to criticise — all are discussed." (Course in *Debating*.)

"All the burden of criticism is thrown upon the members of the class as soon as adequate standards of criticism can be set up. By this means the students are taught to make discriminating but tactful judgments about reading and speaking.

"The material for reading in the projects which each is required to undertake, is taken from those bits of school literature which have been or are likely to prove difficult to handle.

"The reasons for successful and unsuccessful attempts in reading and speaking in the public schools are probed in great detail.

"The class is notified early in the course that any move made by the instructor in the conduct of the recitation or in the arrangement of the material will be cheerfully explained on request.

"About one-fourth of my time in class is spent upon the strictly pedagogical aspects of the subject." (Course in *Elementary Reading and Speaking*.)

The fact that the courses in public speaking have been so clearly and definitely adapted to the professional purpose of the normal schools in comparison with the courses in rhetoric, composition, and literature is perhaps to be explained by their relatively recent development as collegiate subjects. Their adjustment to specific purposes is not so likely to be impeded by the traditions that naturally cluster about a subject that has been organized and taught for a relatively long time in the field of "general" education.¹

(2) ANCIENT LANGUAGES

Courses in the ancient languages, and especially in Latin, form a substantial proportion of the total offerings at each of the normal schools, altho the actual enrolment of collegiate students in these courses is so small as to be almost negligible.² Cape Girardeau provides ninety-one and one-third semester hours of Latin and Greek and three secondary units of Latin — certainly an ambitious program for the single instructor assigned to this work. These are approximately equal to the offerings in Latin and Greek at the University of Missouri, where a teaching staff equivalent to at least four full-time instructors is provided.

It is clear that very few of these courses actually are or can be given during any

¹ This is not to say that these "academic" traditions are always to be deplored. In curricula of the general or liberal type, the plan of organization which is based upon the organic development of a body of knowledge will doubtless furnish the best pattern for the organization of the teaching. The danger lest the work become detached and formal may be corrected by the present tendency, even in these general courses, to employ the "problem" method.

² See page 406.

one year, and yet nothing appears in the catalogue to indicate this fact,—a policy of catalogue construction that is the legitimate, or perhaps illegitimate, child of the elective system. It is the custom at certain universities to announce in advance courses that constitute an organic sequence thru several years. The normal schools have no such excuse; the courses have no reference to work actually under way, and are apparently published for the sake of appearances only.¹

Another interesting fact is revealed by a comparative examination of the offerings of the schools. Out of twenty-six different collegiate courses in Latin offered by the five normal schools, only three (Cicero, Vergil, and the teachers' course) are found in all of the schools. Twelve different courses, aggregating more than fifty-five semester hours of credit, are found only once in the list, and seventeen different courses, aggregating eighty-six semester hours of credit, are found in fewer than three of the schools. The conclusion seems justified that, even in so old and well-standardized a subject as Latin, there is considerable difference of opinion as to what the qualifications of the secondary teacher should be. It is scarcely possible that all of the courses finding a place upon this list are of equal value in the preparation of students who are planning to teach Latin in the high schools.

Upon the part of the instructors in the classical languages a spirit of genuine devotion to the cause of Latin education was noted in each of the schools. This is due in part, of course, to the necessity that the classicists have faced of defending their studies against criticism. The following extract from the outline of one of the instructors is typical of the attitude :

"It is a part of this course to show that Latin has its place in Education. To show the student that Latin trains along the lines of observing, reasoning, recording and expressing. So much stress is placed upon this that it is hoped the student will carry away an attitude which will tend to make him use this subject as a medium for the advancement of the essentials named."

But this keen enthusiasm for education in Latin upon the part of the instructors is not peculiar to the normal schools, nor are its expressions here essentially different from what one hears in the classical departments of the liberal colleges and universities. Whatever may be the ultimate solution of the Latin problem, the normal schools that prepare high school teachers have a unique opportunity which cannot be adequately met merely by reiterating the traditional affirmations of the value of classical study. The only way in which Latin can escape the stigma of a "dead" language is for it to show life. This is fundamentally a teaching problem, and it is here that the normal schools have their golden opportunity. There are excellent Latin

¹ In one of the schools visited in the spring of 1915, twenty-seven collegiate courses in ancient languages were listed in the catalogue, and by a curious coincidence just twenty-seven students of collegiate grade were enrolled in the department. When the instructor was asked why so many courses were offered, he replied ; "The Board gauges a man by the class enrolments ; hence instructors offer a large number of courses." By another curious coincidence, this instructor during the term in question taught twenty-seven hours each week. In the following year, the average enrolment in all of the collegiate classes in the classics was approximately twenty-one students, divided among three classes. The class enrolments varied from three to sixteen with an average of seven. The instructor carried in addition two units (ten hours a week) of secondary work.

teachers in the Missouri normal schools who could do much to pass on to their students not only a subject which they have made vital in their own instruction, but the art of making it vital. Every course must be in a very real sense a teacher's course. If the preparation of high school teachers of Latin could be assigned to a single school; if then the instructor could concentrate upon six or eight fundamental courses with the aforesaid aim, undistracted by the presence in his classes of students who are taking Latin for purposes other than teaching, and unworried by demands for "numbers," he could conceivably do more to ensure the permanence of his subject in the nation's culture than the heated arguments of the controversialist have so far accomplished.¹

(3) MODERN FOREIGN LANGUAGES

In the total number of courses offered in modern foreign languages, the variations among the five schools are not significant.² Kirksville, however, concentrates its energies upon one language, while Warrensburg and Springfield provide instruction in two, and Cape Girardeau in three.

The instructors' reports indicate that few if any of the courses are taken exclusively by prospective teachers of foreign languages. In most cases, indeed, the enrolment is far from homogeneous. It is consequently not to be expected that the instruction will reveal a clear adaptation to a professional purpose. With one exception, the instructors report that the courses are conducted substantially as they would be in any institution of similar grade. The exception is interesting in the light that it throws on the kind of differentiation that is both possible and profitable:

"I usually have students visiting the course who have had several years of German, but intend to teach, so various points are emphasized for their benefit—that is: they are told that such points should be emphasized; it becomes a conscious process; while these points are emphasized or drilled just as much without their presence, the student is less conscious of the same process." (Class in *First-year German*.)

The fact that advanced students who are preparing to teach the subject attend this beginners' class without credit for the sake of receiving this essentially professional instruction in the rudiments of the language is in itself testimony to the need and value of courses of this type covering the fundamental subject-matter from the point of view of the teacher. It is possible that, in the languages, visiting beginners' classes of high school grade would be preferable for this purpose to enrolment in collegiate classes of the "review" type; but even in this case, there would be a distinct advantage in having the visiting students actually registered in the class, under some-

¹ What might be done, and one of the obstacles which prevents its being done more generally, will be clear from the following report:

"Not much of the pedagogical element is included, but some. Whatever is stressed is pointed out and the learner is made to know and feel the reason for this stress. Difficulties of Latin peculiar to Cicero are dwelt upon, and the method of mastering them constantly held up to the class. But as many take Latin who will probably not teach, pedagogy is not made prominent." (Course in *Cicero's Orations*.)

² See page 407.

thing akin to the "participation" plan already referred to; that is, they should be responsible for preparing each lesson and should be ready to "recite" as regular pupils.

In the advanced classes, too, there should be innumerable opportunities for the kind of professional work that has been emphasized in the preceding discussions,—that is, analysis of the students' own experiences in learning as a means for laying bare the principles, precepts, and ideals of teaching. In so far as the observations made in connection with the present study furnish a basis for judgment, it should be said that the teaching of the modern languages in the normal schools is exceptionally well adapted to serve as a model of what expert and highly efficient teaching in this field should do. It remains only to make its potential value dynamic by systematically bringing to the students' consciousness the details of artistry that constitute so important a part of its excellence. Judging from the instructors' reports, these details are now left in the background for the student to detect and profit by if he can. But the very essence of artistry in teaching, as in other fields, lies in the fact that the elements which make it up are hard to detect. One looking upon a fine bit of teaching is likely to be impressed by its apparent simplicity, and to conclude that after all any one could do as well,—just as one is likely to gain a similar impression from observing the finest acting or listening to good public speaking. Like the serious student of any art, the prospective teacher who is working with a real master must get something more than the total effect of the masterly teaching: he must see the elements that make up this total effect, and understand something of the part that each plays. The best time to do this, we believe, is immediately after he has himself gone thru with the very learning experience which it was the master's purpose to bring about.

(4) HISTORY AND GOVERNMENT

What was said in the section that treated of the courses in English composition and literature will hold in the main for the normal school courses in history. The variations in the amount of work offered, among the different schools, are somewhat wider than in the case of English.¹ Kirksville provides collegiate courses in history, government, and economics to the extent of one hundred semester hours, and in addition offers secondary courses aggregating two and two-thirds units, equivalent in the demands upon the teaching staff to at least twenty semester hours. In history Kirksville offers more work than the University of Missouri.² The offerings in the other normal schools, however, are significantly fewer, Springfield providing for only thirty-seven and one-half semester hours with two and one-third units of secondary courses.

Again, the question is not whether a normal school is to be criticised for offer-

¹ See pages 407, 408.

² The history offerings at the University of Missouri in 1917-18 totaled 50 semester hours; at Kirksville, subtracting the 30 semester hours in government, economics, and sociology, the history offerings on the collegiate level amount to 70 hours.

ing more work in a certain subject than is offered by a university; it is conceivable that this may be justified. The question is rather whether the work that is offered is designed to meet the particular professional need for which the normal school exists. The outlines submitted in history reveal in fewer cases than those in English any attempts to professionalize the work. Even in the reports on American history, the replies indicate that there is no significant modification of the courses from the academic type. The comment most frequently made is that nothing is attempted in a pedagogical way beyond making the teaching as good as possible in order that it may serve as a model; in three or four instances the instructors state that developmental methods of teaching are emphasized much more than would be the case were the students not preparing to teach. Two illustrations will typify the character of nine-tenths of the responses:

“Formal pedagogy is little thought of. I have never really thought of considering the pedagogical and academic work as separate in this course. But I am trying to teach teachers or prospective teachers. I do not believe, however, that I would change the course a great deal if none of the people were to be teachers. Of course if none were to be teachers, I would bother very little with special reports on how to teach the subject in the high school.” (Course in *American Constitutional History*.)

“The pedagogical element consists mostly in the teacher’s methods and example. The course is more or less a ‘model course.’”

It does not seem to be realized that however much or little a student may learn by “unconscious imitation,” nine-tenths of the value of a “model course” in subject-matter, as in the training school, is lost on a prospective teacher unless the distinctive elements that make it a “model” are explicitly pointed out at the time. In his attempts to do this many a normal school teacher might discover serious defects in his teaching as measured by the results in individual cases, and it would not be unfair to require him, as a model-maker, to measure his success by the extent to which he could justify his procedure to his young critics. Such is precisely the problem of the clinical operator.

The courses in civics and government are not essentially different from the courses in history in this respect, with the exception of two or three courses that emphasize community civics, where an explicit attempt is made to illustrate the use of local materials. In describing one of the courses offered in the history of Missouri the instructor also emphasized his efforts to acquaint students with the possibilities of utilizing the immediate environment.

(5) MATHEMATICS

Collegiate courses in mathematics in the normal schools are relatively less numerous than those in English and history, and in no school do they aggregate in semester hours one-half of the corresponding offerings at the University of Missouri.

Doubtless one reason for this lies in the fact that the preparation of the high school teacher of mathematics is much more definitely standardized than is the preparation of the English or history teacher. It is generally assumed that, as a basis for teaching secondary mathematics, one should have had collegiate courses in solid geometry, trigonometry, college algebra, analytical geometry, and the calculus; and the appearance of these subjects upon the programs of normal schools that aim to prepare high school teachers is to be expected. For good measure, two schools add the theory of equations, four schools surveying, and two schools astronomy.¹

It is open to question whether the courses in surveying and the theory of equations might not better be replaced with a composite course, somewhat similar in scope to the "industrial mathematics" offered at Warrensburg,² but requiring as prerequisites trigonometry, solid geometry, and perhaps analytical geometry and the calculus, rather than being open to any high school graduate as is the Warrensburg course. In other words, would it not be well, upon the advanced training provided by the collegiate courses, to organize a distinct course in applied mathematics that would enable the prospective high school teacher very richly to supplement the secondary courses that he is planning to teach? This could well include such information regarding surveying as would be most useful to a high school teacher who, after all, is not planning to give a technical training to embryo civil engineers, but rather to utilize his knowledge of measurements as a basis for vivifying elementary algebra and geometry. It could also include some reference to navigation, aviation, machine construction, and other arts, the technical details of which are beyond the high school pupil, but certain insights into which he may easily gain in connection with his courses in elementary algebra and geometry. The normal school student who is looking forward to high school teaching in mathematics could advantageously take this "applied" course after he has had the collegiate courses named, particularly in view of the fact that the accepted standards for preparing a high school teacher of mathematics require him to take these collegiate courses in any case if he wishes to qualify himself for the better positions.

It would seem, too, that for purposes of preparing the high school teacher, it would be possible to reduce college algebra, analytical geometry, and the calculus each to four semester hours in place of the five or six that most of the schools offer. This with other possible reductions would make it feasible to offer and require one or more courses dealing with the actual content of algebra and geometry as taught in the high schools, — courses that would be "professionalized" in the same thorough-going manner that has been described in connection with collegiate courses in the elementary subjects. This, again, is a step that the normal schools of Missouri might profitably take toward constructing real professional curricula for secondary teachers.

It is hardly necessary to quote in detail from the instructors' outlines the statements that reveal as plainly as in the courses previously discussed the almost total

¹ See page 408.

² See *Catalogue*, 1917-18, page 80.

absence of any clear adaptation of the work to a professional purpose. In an old and highly standardized subject like mathematics this is perhaps little to be wondered at, and yet the demands that mathematical study makes upon even the keenest native intelligence are so great that the experience of learning in this field could be made of very great service in gaining an insight into the problems of teaching. One of the instructors has at least glimpsed the possibilities in connection with the study of the calculus, pointing out that the experiences of the students in mastering the process of integration may serve as an object-lesson for them in connection with teaching the more elementary branches. But much more typical of the general attitude of the mathematics instructors toward the general problem are the following statements:

"I insist upon *knowing* the subject. Those who expect to teach it will be able to develop their own methods of doing so."

"As this is not a pedagogical subject no direct attention is given to the pedagogical side of the subject."

The normal schools have long reproached the "reactionary colleges and universities" for this attitude and deplored it; how comes it here?

(6) PHYSICS AND CHEMISTRY

The collegiate offerings in physics and chemistry in the three schools that emphasize most strongly the preparation of high school teachers seem on the whole to be well selected.¹ There is evidence, however, that the instructors are overloaded with work, and this evidence was borne out by conferences with instructors at the time of the visits to the schools. One instructor, for example, found it necessary to be in classroom or laboratory from half-past seven in the morning until half-past five in the evening, and to give his evenings and Saturdays very largely to the correction of notebooks and reports. This instructor teaches during forty-eight weeks of the year. The collegiate work in his subject (chemistry) is designed to prepare teachers of the subject in high schools, and to give the essential basis in chemistry for special teachers and supervisors of the household arts. Only five high schools in the district served by this normal school, outside of one large city, offer courses in chemistry, and it is quite unlikely that the demand for teachers of household arts in the district will require more than four or five supervisors annually for many years to come. A situation of this sort illustrates the marked unwisdom of a policy that permits five normal schools of the state as well as the state university to attempt the preparation of practically all types of high school teachers and special supervisors.²

The instructors' reports suggest that the work in the physical sciences is rather more distinctly pointed toward the teaching problem than is the case in the departments heretofore discussed, altho the pedagogical element is usually fastened on to

¹ See page 408.

² See page 260.

the academic instruction rather than woven into it. The presence in the same classes of students with different objectives is undoubtedly a handicap to a thoroughgoing professional treatment, as is indicated by the following comments taken from the course outlines:

"In the course in general chemistry, we cannot confine ourselves to the interests of any one group. Where the student is preparing to teach chemistry, we advise with him as to the type, kind, etc., of materials needed. I also try to keep such students in touch with the best literature on physical science teaching. (Course in *General Chemistry*.)

"No attention paid to this [the pedagogical element]." (Course in *Organic Chemistry*, in which were enrolled at the time the report was given, prospective teachers of chemistry, general science, household science, agriculture, and mathematics.)

Occasionally, the typical university point of view crops out in the instructors' comments; for example:

"Difficulties met with in high school work and laboratory methods and management are discussed incidentally, but our main effort is an attempt to present and thoroughly acquaint the student with the fundamental principles of physics. We work on the assumption that the student will be able to work out the details for himself if the principles are understood." (Course in *College Physics*.)

(7) BOTANY, ZOÖLOGY, PHYSIOLOGY, HYGIENE, AND SANITATION

Whether from the point of view of preparing teachers of the biological sciences in the high school, and teachers of physiology, nature study, and general science in the elementary school and junior high school, or from the point of view of laying an adequate foundation in biological knowledge for the study of psychology, sociology, and educational theory, the offerings and equipment of the Missouri normal schools are notably defective.¹ At the time that the present study was made, Kirksville offered no biological courses of collegiate character except five semester hours of bacteriology and one term's work in physiology. Apparently the course in bacteriology may be taken by students who have had no prerequisite biological work. The other schools afford much better balanced biological programs, altho the offerings are less numerous than in the physical sciences, except at Springfield, where the two groups are equal.

The neglect of the biological sciences is the more difficult to understand in view of the liberal offerings in chemistry provided by four of the schools. The biological sciences appear in the high school programs somewhat more frequently than chemistry, and they have a more intimate relation than chemistry to the nature study and geography of the elementary school, to physiology and hygiene, and to the general or elementary science that is coming to find a place in junior high school programs. From every point of view, then, it would seem that the biological sciences should be the last to be neglected by the normal schools.

¹ See page 408.

At Kirksville seven and one-half hours of physiology, sanitation, and hygiene are offered, but no work in these subjects is required for any of the collegiate degrees or diplomas. Warrensburg offers five hours of hygiene, but this is apparently not required. Maryville requires for all of the collegiate diplomas a course in "Home Economics and Sanitation." Springfield also requires two and one-half semester hours in sanitation. Cape Girardeau has no offerings in this field.

If the biological courses are taught differently in the normal schools than they are in institutions of general education, there is nothing in the reports of the instructors to show it. In spite of the almost innumerable points at which a knowledge of biology could be made to enrich and vivify instruction in many of the subjects taught in the elementary and secondary schools, the actual organization of these courses in the normal schools follows very closely the academic or "pure science" model. The courses in hygiene and sanitation reveal somewhat more definitely the dominance of a professional aim, altho even here the adaptation is slight.

(8) GEOGRAPHY AND GEOLOGY

In view of the emphasis given by the normal schools to the preparation of highschool teachers, the meagreness of the offerings in geography causes no surprise.¹ Most of the collegiate work is in physiography, and here Kirksville and Maryville offer a sufficient amount of work to equip a student to teach physiography as a minor subject in the high school. The course at Springfield is reported by the instructor to be planned definitely as "a basis for geography teachers," only a few of whom expect to teach physiography in the high school; in other words, the course is organized primarily for prospective elementary teachers. In the remaining schools, too, it is evident that the work in physiography is more definitely professionalized than are the science courses previously discussed. At the same time, the absence of courses in general geography and the fact that none of the schools requires a course in this subject in any of the collegiate curricula point again to the neglect by these schools of the type of subject-matter that the elementary teacher most needs.

(9) AGRICULTURE

The normal schools' offerings in agriculture on the collegiate level are relatively numerous at Kirksville, —forty-five semester hours in the aggregate, in addition to one secondary unit.² In two of the other schools, also, a substantial number of courses are offered. It would undoubtedly be in the interests both of efficiency and economy to limit the preparation of high school teachers of agriculture to one or at most two of the normal schools and the College of Agriculture at the university. At the present time two institutions, each offering a good curriculum for such teachers, could amply meet the demands of the state. The provision of elementary courses in

¹ See page 408.

² See page 409.

agriculture for rural school teachers should, obviously, be made in all institutions preparing students for this service.

The attitude of the teachers of agriculture toward the professional problem as revealed on their outlines is interesting in that it is, in many cases, a distinct exception to the general rule that instructors in the "newer" subjects take much more interest in teaching as an art than do instructors in the "traditional" subjects. Some of the comments on the outlines are indeed illuminating; they are reproduced *verbatim et literatim* as presented:

"The students in this course are usually loaded with educational pedagogy at time of taking this course. They need information on the Gospel of agriculture. How to meet the patrons of their communities in his own environments, that is, the teacher of agriculture, first of all should know a good animal, good type of plant, a well-prepared seed bed, and the like. [How the architect of this sentence won his diploma merits a special investigation.]

"The work should be definite, not just the study of corn as an assignment, but make definite assignment, as Seed Selection, Storing seed corn, corn harvesting machinery. All the Practicums which is the major part of the course emphasize I Object—II Procedure—III Results—IV Questions—and V Conclusions." (Course in *Crop Production*.)

"I have give no attention to the pedagogical side of the work more than to point out the opportunities that the rural teacher has as a leader in the social activities of his district." (Course in *Rural Economics*.)

"I teach as I was taught in an agricultural college. The ability *to do* rather than *to teach* is the thing stressed.

"I teach as though every student was going to start a garden of his own immediately.

"Owing to the limited amount of time available little attention is given to the pedagogical side of the subject. The book is followed rather closely. When the opportunity presents itself methods of teaching are given." (Course in *Elementary Agriculture*.)

The above excerpts are fairly characteristic of seven out of the eight instructors in agriculture who submitted reports in 1915. The eighth, however, has really seen and appreciated the problem of professionalizing his work:

" . . . the whole trend of the course is influenced by the fact that students are to be teachers of the subject. I give a very few lessons which are specifically pedagogy of the subject. However, I doubt if there are any lessons given that do not have some of this element in it. I will give here just a few of the topics which are taken up 'in the course of events.' 'Why agriculture should be taught in schools,' 'How to use the surrounding farms for illustrative materials,' 'Types of school gardens for the country and what a school garden is supposed to do,' 'Apparatus desirable for a country school,' 'What a rural teacher can do to make the rural boy and girl realize the necessity of selecting good germinal seed,' 'How to teach conservation of soil fertility.' Only the first topic has a formal place in the course. All of the others are taken up incidentally when

the class is on the topics in question. I also ask quite a number of questions in this form: What questions would you ask a farmer if one whom you did not know well should ask you the question—'Would it pay me to plow my soil deep?' I do not think that I would ask so many questions in this form if my students were not to be teachers." (Course in *General Agriculture*.)

(10) FINE ARTS

The variation among the five normal schools in the courses offered in music, drawing, painting, and similar subjects is striking,¹ and again suggests the importance of designating certain single institutions as training schools for special types of teachers.²

As in most of the "special" subjects, the courses in graphic art show a commendable adaptation to the professional needs of the students, in that emphasis is commonly laid upon the types of work and materials that are available for art instruction in the elementary and secondary schools. The elective system, however, leads to a mixture of students that cannot fail to handicap the most effective teaching of the subject for professional purposes. Thus in the spring of 1915, a course in advanced drawing at Warrensburg enrolled prospective kindergartners, primary teachers, intermediate and upper grade teachers, high school teachers of English, history, mathematics, and foreign languages, and art supervisors; a course in free-hand drawing at Kirksville enrolled prospective kindergarten and primary teachers, intermediate and upper grade teachers, and art supervisors; a course at Cape Girardeau in design as applied to basketry enrolled prospective teachers of the kindergarten and all elementary grades, high school teachers of English and history, and supervisors of art, music, and manual training. If the training of special art teachers and supervisors were limited to one of the schools, the number of offerings in the other schools could be reduced, as has been suggested, and the energies of the instructors could then be devoted to the basic courses, differentiated in respect to the type of work (primary, intermediate, upper grade) which the various groups of students have in view. Brief, undifferentiated courses in art appreciation and the history of art should also find a place in all of the longer curricula.

In music it would be advantageous to limit the advanced courses in harmony, counterpoint, instrumentation, and orchestration to one school for the preparation of supervisors and special teachers. In the schools not giving such advanced curricula there should be a carefully constructed program in music adapted to the needs of elementary and high school teachers. Doubtless there will need to be some differentiation in this program,—the primary and kindergarten teacher, for example, should have a type of instruction that the upper grade and high school teachers will not require.

In addition to this basic work, which should be required of all, individual lessons in voice, piano, violin, and perhaps other instruments should be available without

¹ See page 409.

² See page 262.

fee to all students who can profit by such instruction. This policy is clearly in harmony with the professional purpose of the normal school, and has been carried into effect at Kirksville with excellent results. If the unusual interest in music that has been developed there could be awakened in all normal schools, it would be greatly to the advantage of the public schools throughout the state. The policy of paying for musical instruction in the normal schools by giving teachers of music the privilege of taking private pupils should be abandoned.

Perhaps more generally than in other subjects do the teachers of music in the normal schools utilize the learning experiences of their students as a basis for ensuring pedagogical skill, and this seems to be true of the courses in appreciation as well as of the courses in technique, where the application of this principle is probably a simpler matter. The following reports reveal some of the possibilities that have been recognized and utilized:

"Practically all pedagogy (applied). If the student can't sing himself he must instruct some one of the class as to just how he wants the work sung. He must analyze and explain the poem. In fact he is *teaching* instead of reciting." (Course in *Vocal Forms*.)

"Pedagogy enters in this to a considerable extent. In fact the course must be pedagogical as its main purpose is to give the student the ability to create a taste for music thru being able to teach the higher forms and make them understood by the average listener. Secondly no one will orchestrate a work well who does not understand form. As an illustration: The student is placed at the piano to play by hand or by mechanism a Chopin Nocturne. He must first explain the 'form,' not to the teacher but to the class, as a lecturer. He must then play it, bringing out the melody, set proper *tempo*, etc. In fact he must do exactly as he would in trying to make a group of boys and girls or men and women understand and appreciate the work. In orchestral forms he must take a baton and direct some of the simpler symphonies, using the school orchestra as an experimental body. Every director is necessarily a teacher. Here is an excellent opportunity to discover whether or no the student has the ability to impart his knowledge to others. [And incidentally to find out if he has any knowledge to impart.]" (Course in *Instrumental Form*.)

(11) COMMERCIAL SUBJECTS

There is a demand for teachers of commercial subjects in the high schools of Missouri, and one of the normal schools should be well equipped to meet it. At the present time, four of the schools — Kirksville, Warrensburg, Cape Girardeau, and Maryville — are each attempting to train commercial teachers,¹ with the result that the work is not well done in any of them. Many students enroll in the commercial courses who do not intend to teach the subjects. In one of the schools, for example, seventeen students were enrolled in four courses in stenography and typewriting; of these, eight definitely stated on the class census slips that they did not intend to teach at all, and

¹ See pages 409, 410.

of the remaining nine, only one acknowledged an ambition to become a commercial teacher. In the spring term of 1915, one hundred seven students were enrolled in the commercial courses at Cape Girardeau,—apparently a normal enrolment for the department. The instructor stated in conference that “about three or four” teachers of commercial subjects were among the graduates of the last graduating class. It is clear, then, that the courses are attended by many students who are not preparing to teach the subjects, and without doubt by a goodly number who are not preparing to teach at all. The presence in the commercial classes of these students, some of whom are very young, is a misuse of the normal school, and cannot fail to handicap the instructors in their efforts to prepare commercial teachers.

At Kirksville, two instructors are employed for commercial subjects, but at the other schools the courses in bookkeeping, shorthand, and typewriting are taught by a single teacher,—and this teacher not infrequently has other duties thrust upon him. At Cape Girardeau, for example, in the spring of 1915, the instructor had charge of all of the accounting for two dormitories,—collecting all board bills, paying for all services and supplies, and ordering supplies and equipment. He did much of his ordering in August and September, and was therefore deprived of a vacation. All of the bookkeeping and correspondence he did without assistance, except for the typewriting that he could delegate to his classes for practice purposes. His hours at school were from half-past seven in the morning until five in the evening, and most of his clerical work was necessarily done at night.

Under the circumstances, there is naturally little effort in the various schools to professionalize the commercial courses with reference to the teaching problem. One instructor, when asked to point out the pedagogical elements in a course in typewriting, replied: “The effect of the will and mind upon the action of the fingers in the operation of the machine”—whatever this may mean. Another report states that about one-tenth of the time in a course in bookkeeping is spent in discussing “how to present various phases of the subject, etc., especially the theoretical with the practical.” The majority of the reports, however, are either silent as to the pedagogical problem, or state that the courses are organized essentially as they would be were the students not planning to teach. In general, the work did not show marked deviations from what one might find in the commercial classes of a small high school or in a business college.

Penmanship appears among the offerings of the commercial department in three of the schools, but it is noteworthy that in only two of the schools (Springfield and Maryville) is there a definite requirement in penmanship in the one-year and two-year collegiate curricula. It would seem incumbent upon every normal school to require instruction and drill in penmanship and in blackboard writing until each student has attained to a satisfactory standard as measured by one of the handwriting scales.

(12) MANUAL OR INDUSTRIAL ARTS

Instructors in the manual and industrial arts in the Missouri normal schools have usually to supervise practice teaching in these subjects as well as to teach the normal school students. In every school, therefore, the burden upon these departments is unusually heavy.¹ Under these conditions, the attempt of any of the schools to prepare special supervisors of manual training without much better staffs and equipment than are now provided is greatly to be deplored. Four of the schools, however, are making this attempt, and in at least three of these the type of handwork in which every teacher in the elementary and rural schools should have some training is being seriously neglected. Springfield, Cape Girardeau, and Maryville make a definite requirement in the manual and industrial arts for students enrolled in the one-year and two-year collegiate curricula. At Springfield the energies of the department are given to these non-specializing students, and the preparation of special teachers and supervisors is not undertaken.

In the two schools that emphasize the training of special teachers and supervisors, the classes are not limited to students looking forward to this work; one instructor reports explicitly that students are encouraged to take the work for purposes other than teaching. Even where a requirement of manual arts is made, any one of a number of elective courses may be taken to meet the requirement. In other words, except in the case of primary handwork, there seems to have been no specific effort to construct a course that will give the student, who is not planning to specialize in this field, just the kind of training that will help him most in his work as a grade or rural school teacher. The instructor in charge of the department at Springfield is the only one who reports that he makes a special effort to adjust his courses in woodworking to this group.

(13) HOME ECONOMICS

The situation in respect to home economics is somewhat similar to that in the industrial arts.² Relatively few special teachers and supervisors of the subject are required; at least, the demand is not sufficient to justify each of the schools in offering a large number of courses for the training of these special teachers. Women who will teach in the rural schools, on the other hand, will find it advantageous to know something of sewing, nursing, and foods and cooking. Neither of these groups seemed to constitute a majority of those who were enrolled during the spring of 1915 in the courses in home economics. One-fourth of one hundred twenty-one registrants reporting stated that they did not intend to teach at all; twenty-nine per cent said that they were planning either to teach high school subjects other than home economics or to take graded school appointments; slightly smaller than the latter group was that which comprised the students distinctly preparing for special home eco-

¹ See page 410. In one of the schools in the spring term of 1915, the instructor in manual arts spent six periods a day with normal school and high school classes, and one period a day with training-school pupils. He also reported that he was teaching two classes in geography.

² See page 410.

nomics teaching and supervision; while only one-eighth of the total number reported that they were looking toward rural school service.

It may be safely inferred, then, that more than one-half of the students enrolled in home economics courses during the term referred to were not taking the work for teaching purposes. At one of the schools (Springfield) the head of the department said, in response to a question upon this point, that the majority of the students were taking the courses "for the work," altho "some are preparing to teach the subject." At another school, the instructor in sewing reported "a good deal of pressure to make the classes large," with the result that some of her classes enrolled elementary school pupils, normal school students of collegiate grade, and married women from the community, all working together. It would seem most desirable to provide separate classes for those who are undertaking certain elementary courses for non-professional purposes, and both to restrict the advanced classes to intending specialists and to organize the work of these courses with explicit reference to their professional purpose. Certainly one of the schools would be sufficient, with the university, to meet the demand for specialists. The remaining schools could then limit their courses, staff, and equipment to the numbers and amount needed to give elementary instruction to the normal school students who wish to carry this work as an extra study, and to provide whatever supervision may be needed in the training schools.

(14) LIBRARY ECONOMY

Kirkville requires a full term (five hours a week) of library economy in all of the collegiate curricula. When this course was visited in the spring term of 1915, the work was quite technical in its nature, involving familiarity with the methods of cataloguing, and including training in the preparation of catalogue cards. In the later announcements of courses (1917), the work seems to have been so modified that the technical features are covered during the first two weeks and the remainder of the term is given to the study of children's literature.

In the other schools, instruction in the use of the library is commonly provided for more or less incidentally,¹ — often during some of the periods set apart for general assemblies. There can be little doubt that the work is important enough to merit a separate course that may well be a constant in all curricula and given soon after the student enters the school. The equivalent of one hour a week for a term should be sufficient for this purpose. Students who are planning to teach English or history in high schools may be expected to take a more extended course which will prepare them not only to make intelligent assignments for the library work of their pupils, but also to take charge of a small high school library, or to act as assistants to the librarian in a larger school.

Kirkville and Cape Girardeau offer more extended courses which suggest that they have in mind the need of some equipment in library technique upon the part

¹ See page 410.

of certain high school teachers. The seven and one-half hours offered by Kirksville (a full year's work) seem excessive for the purpose; the four hours provided by Cape Girardeau will probably prove to be as much time as a teacher whose chief work is in English or history can afford to give to library technique.

(15) PHYSICAL TRAINING¹

Work in physical training is not required at Kirksville, altho an abundance of elective opportunities are offered. At Cape Girardeau, all one-year and two-year collegiate curricula must be accompanied throughout by "physical practice," and for this required work no credit is granted. At Warrensburg, "all students are required to take physical training three hours a week during half as many terms as they are enrolled and in attendance,"—a requirement that must be rather hard to "check." At Springfield, a term's course in physical training is required for the one-year and two-year curricula. At Maryville, the requirement is two and one-half semester hours.

In view of the basic significance of physical welfare to the state and nation, a larger emphasis on physical training in the normal schools is most urgent. Physical exercises, involving either formal work or active participation in plays and games, should be a part of each student's daily program. The policy of satisfying requirements by concentrating physical exercise into a term's course seems hardly consistent with the twofold purpose of this important work: (1) the preservation of health and the formation of effective health habits and ideals upon the part of the student, and (2) the preparation of every prospective teacher to participate in some measure in the recreational activities of his pupils.

C. THE QUALITY OF NORMAL SCHOOL TEACHING AS AN ELEMENT IN THE CURRICULUM

It is not the purpose of this section to attempt an evaluation of the teaching in the normal schools from the point of view of its specific efficiency in imparting knowledge and skill to students. To yield satisfactory conclusions, such a procedure would involve not only an elaborate program of tests and examinations, but also a comparison of the results with norms and standards that are not as yet available in the field of higher and professional education. The aim in the present discussion is rather to determine, if possible, the extent to which the actual class work of these schools serves the student as an object lesson in the art of teaching. In the preceding sections, each subject of the curriculum has been examined from the point of view of its relation to the professional purpose of the school; it is from this same point of view that the teaching will be discussed. In other words, quite aside from the content of instruction, the teaching itself may be looked upon as an essential, possibly the essential, part of the professional curriculum.

¹ See page 410.

THE NORMAL SCHOOL INSTRUCTOR PRIMARILY A TEACHER

The policies of normal school administration have naturally favored the selection of teachers of marked ability. In the earlier days, these teachers were often recruited from among those who had achieved unusual recognition in the schools of the surrounding territory. More recently the demand for higher qualifications in scholarship has shifted the source of supply to the colleges and universities, but the appointees almost invariably have had a period of successful experience in elementary or high schools preceding their graduate study. Occasionally the graduate student who looks to productive scholarship rather than to teaching for his real career accepts a normal school appointment—perhaps because the coveted opportunity to enter university work is not presented; but if such a person remains in the professional school, the pressure of the heavy program of teaching and the general absence of sympathy for the point of view of pure research usually combine either to transform or to repress his earlier ambitions. The typical normal school instructor is first of all a teacher, and in Missouri he is not infrequently a teacher of exceptional talent and aptitude for his work.

CHARACTERISTICS OF NORMAL SCHOOL TEACHING

From the point of view of general classroom procedure, the teaching with which the students of the normal school come into contact represents the kind that they will be expected to do in their later work, especially if they teach in the upper grades or in the high school. The "lecture method," against which so many criticisms of college teaching have been leveled, is little in evidence even in the normal schools of the collegiate type. In fact, the infrequency of the lecture and the prevalence of the class recitation and discussion constitute the most noticeable distinction between these schools and the liberal-arts colleges.

The quality of the teaching, however, is far from uniform. Excellent teaching and poor teaching may be found in each of the normal schools and training schools. There is some variation as to departments: in the visits made with the present study in view, the best teaching was found most frequently in the classes in history, German, Latin, English, and mathematics. Poor teaching seemed to be most prevalent in agriculture, the physical and biological sciences, and education (including psychology), altho in each of these departments instances of really superior work were not infrequently observed. The relatively poor showing made by the instructors in professional subjects may be explained in part by the still unsatisfactory organization of the materials included in these courses, but it is much more readily accounted for by the fact that the normal schools have selected a less highly educated and less well-trained group of teachers for the professional courses than for the academic courses.¹ The teachers of agriculture and the natural sciences, while on the whole as well educated as are the teachers of language and history, do not seem to represent as high a level of native

¹ See page 283.

ability,—due perhaps to competition from other fields for technically trained men. It should also be recognized that agriculture is not yet well organized for teaching purposes, and that the teaching of the physical and biological sciences is regarded not only in normal schools but in colleges generally as less satisfactory than the teaching of mathematics and the humanities.

The varying excellence of the teaching, however, is not to be explained entirely by these departmental differences, for the greatest contrasts will be found side by side in the same department. The unevenness of teaching in the normal schools may be traced directly to the same causes that operate widely with like result in colleges and secondary schools. Practically all such institutions compare very unfavorably in this respect with well-supervised elementary schools where, altho the teachers are commonly less mature and always less well educated, the uniformity of really superior teaching is often remarkable. The difference is due both to the better professional training of the elementary teacher and to the factor of critical supervision that forms a potent stimulus to the acquisition and maintenance of a high level of teaching skill. Not only are the teachers of the secondary and higher institution largely untrained in the technique of teaching, but the stimulus of supervision is completely lacking. The traditions of higher education are violently opposed to classroom visitation and criticism. The notion that one who has mastered one's subject-matter is thereby qualified to teach it leads apparently to the absurd corollary that one who is not an expert in the subject is disqualified from criticising the teaching.¹ The large high schools in which the teachers are almost exclusively subject-matter specialists bred to the university point of view have reflected the same prejudice against supervision. In many of the normal schools the same general attitude prevails, altho very greatly tempered by the professional character of the work. Presidents and principals, too, are not infrequently loath to assume the responsibilities of classroom supervision, in part because they do not wish to offend their teachers or to seem unduly to interfere with their freedom, in part from lack of time and opportunity, and in part, also, because of the general feeling that one who has been appointed to a normal school instructorship must be *ipso facto* a superior teacher, whose need for direction and advice has passed with his apprentice days.

TEACHING SHOULD BE EXEMPLARY

It would, indeed, be unfortunate if normal school instructors were to be subjected to petty, narrow-minded, faultfinding criticism. On the other hand, there is need for ensuring a much higher level of classroom efficiency than is now to be found in these schools. The initial skill of the teachers who are sent out from the normal school will

¹ This attitude is well illustrated by the following extract from the report of the Wisconsin normal school survey (1914); the words are those of an instructor reporting upon the amount and kind of classroom supervision given by the president of the school:

"... How much real supervision can a president do regarding the work of a department in which the man in charge has specialized in his subjects in college and has spent three to four years in further postgraduate study? The president can only at best have a general knowledge of the work." (Page 129.)

depend in no small measure upon the teaching to which they have themselves been subjected. It is true that the demonstrations of good class work in the laboratory school are intended to furnish such models, but the actual teaching in the normal school classes is of even greater significance. The instruction in these classes should be intelligent and spirited,—and this, generally speaking, it is in the Missouri normal schools. But it should be more than this: technically it should be as nearly perfect as it can be made. Fortunately or unfortunately, it is the externals of teaching that the student will most frequently tend to imitate; the stronger and more vital the teaching, the greater the likelihood that these externals will be reproduced. Even the idiosyncrasies and mannerisms of an effective teacher are more likely to be perpetuated in the initial teaching of his students than are his enthusiasm and the spirit of his instruction. If the technique is bad, then, even tho for the immediate purposes its ills are more than counterbalanced by its vigor, enthusiasm, and inspirational force, the effect upon the prospective teacher is unfortunate.

Because good teaching is a matter primarily of knowledge and enthusiasm, it is not to be inferred that its external character—its form as contrasted with its deeper purpose—is of but superficial significance. “Good form” in teaching bears the same relationship to efficient teaching that good form in writing bears to efficient writing. Knowledge and enthusiasm are essential in either case, else the teaching or the writing will be empty or dead, or both. Substance and vitality are of course to be chosen in preference to form alone, if all three cannot be had; but to assume, as many critics of “pedagogy” have assumed, that one who chooses substance and vitality must avoid good form and *vice versa*, is as absurd as to assume that good English can be spoken only by those who have nothing to say, or that vigorous English is always crude English.

The analogy may well be pushed further. Just as the ability to use language in good form depends largely upon the measure in which good form has characterized the language that one has most frequently listened to and most frequently read, so the ability to teach effectively and with distinction will depend upon the measure in which good form has characterized the teaching to which one has been accustomed.

There can be no doubt that the normal schools should set a higher premium than they now do upon classroom teaching that is unimpeachable from the point of view of technique. The emphasis that normal schools formerly laid upon this factor was doubtless misplaced, not because technique was then or is now unimportant, but because such emphasis lacked balance. It was based on the assumption that form was an end in itself, and it was certainly accompanied by a tendency to belittle the content with which it dealt. But that time has passed; under the sting of criticism from the colleges and the universities, the normal schools of to-day are not infrequently quite as insistent upon the priority of “scholarship” and quite as impatient with the assumptions of “mere method” as are their academic critics, forgetting that this view, too, is narrow and dogmatic in its own way. The form of teaching, after all, is an impor-

tant and usually an indispensable factor in the efficiency of teaching, and the artist's attitude which, far from neglecting form, seeks to master it and to make it render the largest possible service, is as important in teaching as it is in painting, sculpture, architecture, writing, and acting.

THE ELEMENTS OF GOOD TEACHING

The technical elements in the art of teaching may be grouped into two classes, which may be termed for convenience (1) the external elements of skill and (2) the elements of insight and resourcefulness. The former are by far the simpler, and under proper guidance may be acquired by any teacher. They can be most easily identified in a negative way by such common classroom errors as repeating answers, limiting recitations to responsive members of the class, being satisfied with "concert" responses, calling on students before stating the question to be answered or the topic to be discussed, failing to speak distinctly, to write clearly, to establish a systematic and habitual method of caring for routine matters, to make definite assignments, and to ensure throughout the recitation the active effort of all members of the class. Few recitations are free from all of these defects, and in the normal school classes observed in Missouri, they were certainly less frequently noticed than they would have been in a high school or a college. They were, however, much more prevalent than one would expect in institutions devoted expressly to teaching as a fine art, and much more prevalent than in the classrooms of a well-supervised system of graded elementary schools.¹

We are speaking here of defects in classroom technique that would seldom occur if good habits had been firmly established early in the teacher's career. The reason that they are so generally characteristic even of otherwise superior teachers is not that these teachers are ignorant of the few simple rules that summarize good classroom procedure, but rather that, in the absence of supervision, they have been too little impressed with their responsibility for developing habits of good form in teaching. When one remembers what a wide difference there is between merely understanding the requirements of good usage in spoken language and the habitual recognition

¹ The following extract from a verbatim report of a lesson in ancient history illustrates in an exaggerated form some of these defects:

Teacher: The Achæan civilization extends down to when?

Student: 1500 to 1200.

Teacher: 1200; right. What man appears before the close of this period?

Student: Homer.

Teacher: What did the Achæans bring to Greece?

Student: Iron.

Teacher: Iron; that's right.

The instructor spends a few minutes in discussing the significance of the introduction of iron; presently—

Teacher: Then we come to what people?

Student: Dorians.

Teacher: Dorians; yes. What part of Greece was settled by the Dorians?

Student: Peloponnesus.

Teacher: Peloponnesus; yes. What was the main town?

Student (after some delay): Athens.

Teacher: Athens; no.

Student: Sparta.

Teacher: Sparta; yes.

of these requirements in one's own speech, it is readily perceived why intelligent and informed teachers often break the simplest rules of their art. Where the pressure of responsibility is absent, the transformation of principles and precepts into well-established habits is almost certain to be slow or to halt completely.

The second group of elements comprising the art of teaching—the elements of insight and resourcefulness—are obviously more important than the external elements of skill. Reference is here made to such factors as aptness and readiness in illustration; clearness and lucidity in explanation and exposition; a keen sensitiveness to evidences of misunderstanding and misinterpretation upon the part of pupils and students; dexterity and alertness in devising problems and framing questions that will focus the attention of the class upon just the right points; a sense of humor that will relieve tense or wearisome situations; the intellectual attitude that requires of itself a reasoned support of each point presented; quickness to detect inattention and lack of aggressive effort upon the part of pupils and students; a sense of proportion that ensures the emphasis of salient topics, and distinguishes between the fundamental and the accessory. These and similar qualities or abilities play an all-important rôle in successful teaching; they are the finer, less obvious factors in “good form;” and they differ from the elements of skill in that they depend upon intelligent adaptation rather than upon habituated processes. They mean not only the possession of resources in the way of knowledge, not only an understanding of child nature or of the capacities and interests of adolescents, but also readiness in summoning resources, initiative in adapting them to rapidly changing situations, and a kind of *rapprochement* with one's class that strikes very much deeper than a mere understanding of its capacities and limitations.

All good teachers certainly are “born” teachers in the sense that their native endowment permits the development of these and similar abilities. Their success presupposes a certain native “talent” for teaching, just as success in any of the fine arts presupposes certain native talents. It is fair to assume that innate talent for teaching, taken in this sense, is much more widely distributed than is talent for music or for painting,—so broad and comprehensive is the field of teaching and so significant to human evolution has been the guidance of the immature. Of the importance of native talent there can be no doubt. In the training of teachers there has been a tendency to go to one extreme or the other: either the native character of teaching talent has been exalted to the extent of assuming that training is useless, or the significance of native talent has been denied to the point of asserting that the art of teaching is merely a matter of understanding and applying certain precepts and principles. The rational view that really successful teaching must rest upon a foundation of native talent, but that these gifts can be immeasurably improved by training, has been slow to develop. As a result, one finds “born” teachers even in the normal schools quite unconscious of the refinements that are possible in their art. Just as the “born” painter or musician, entirely without training, may do work that shows real but crude ability, so the “born” teacher, likewise untrained, may teach with undeniable success,

but also crudely—which is to say more or less wastefully, and falling far short of a maximum of effectiveness.

Because of the lack of technical criticism already noted, it is not surprising that the normal school teachers as a group are stronger in those elements of their art that depend upon insight and resourcefulness than they are in what we have termed the elements of skill. But these defects in technique should be remedied, in order that the students may live constantly in an atmosphere of “good form” in teaching. Furthermore, the virtues of insight and resourcefulness, by as much as they are more difficult of analysis, should be made the objects of the students’ conscious attention and study. The teacher himself is the laboratory for the demonstration of these qualities; they are less likely to be imitated than are the more external factors of good form, and unless they are made explicit to the student, the school fails to utilize resources of very large value that are immediately at hand.

UTILIZING GOOD MODELS

There are two means within the reach of every normal school by which this end may be sought. In the first place, instructors who know and appreciate each other’s work can do much by calling the students’ attention to the successful qualities of other teachers. For example, one teacher is especially skilful in utilizing the developmental or Socratic method of teaching. Ordinarily the students will like his work, but they do not always know why. To get them to study it professionally—to watch the lesson evolve under the master’s direction; to note the purpose in the asking of this, that, or the other question; to see why this illustration is adduced, why that suggestion was not followed up, why this rather than the other topic was elaborated—will mean that the student’s appreciation will be keener and his appropriation more intelligent. There are innumerable opportunities in the work of every instructor thus to throw into relief the high points in his colleagues’ teaching—provided that he knows it well. A systematic interchange of visits¹ among instructors could be made gradually to lead to this result, and to render the added service of promoting the general integration of all of the school’s activities by securing a more intimate mutual understanding among all members of the staff.

A second method of making the students conscious of the finer points in the art of teaching as exemplified by their instructors is to adopt the plan, reported by one of the Missouri normal school teachers, of making it natural and customary for the students at the close of the hour to ask for the justification of any step taken by the teacher in conducting the class. The careful use of a brief period at the close of the class exercise for the express purpose of discussing the technique of the lesson would, we believe, exert a helpful influence upon all concerned.

¹ Such visits have been repeatedly recommended and urged by normal school presidents, but the only way in which to ensure them is to make them a part of the stated duties of the instructor,—with time freely granted for the purpose. In a school of forty or fifty instructors it should not be impossible for each one to see the classwork of each of the others at least once a year.

The discussion of insight and resourcefulness as elements of the teacher's art has so far been concerned with the means by which these qualities, as exemplified in the work of the normal school teachers, could be made objects of study and imitation by normal school students. There is another problem associated with these factors that merits consideration. An instructor who has an unusual measure of native talent for teaching often fails to grow, and the problem of ensuring his progressive development must be a matter of concern to those responsible for normal school efficiency. Not every teacher can attain old age still doing his work with all of the enthusiasm of youth expressed in a consummate art which the years have ripened and matured. Such growth is undoubtedly subject to natural limitations which vary widely among individuals. The problem is to ensure that each individual shall approach as closely as possible to the maximum of his capacity, and there is no doubt that the conditions of work in many normal schools to-day are unfavorable to such continued growth. Some of these conditions are discussed elsewhere in this report,¹ but there are certain suggestions that are particularly pertinent here.

STIMULATING GOOD TEACHING

In the first place, steady and continued growth in power to teach is not to be expected in the absence of recognition and appreciation of one's work. Under present conditions it is the rare exception that expertness in the very art for which the normal school stands earns an adequate recognition and reward. There is, indeed, no system by which unusually effective teaching may be recognized and rewarded. Where the elective system prevails, the popularity of the teacher with his students and his ability to attract large numbers to his courses constitute one means of measuring his efficiency, but it may be a most deceptive measure in that it constantly tempts the teacher into policies and practices that succeed not because they mean expert teaching but because they employ the seductive arts of flattery or the tempting bait of low standards.

In the second place, progressive development in the higher qualifications for instruction cannot be expected from teachers whose hours of stated classroom duties are so long as quite to preclude the preparation necessary for first-class work. When a teacher must teach five periods a day for five days in the week and for forty-eight weeks in the year, his only hope of survival lies in the most careful husbanding of his own energy. The hours are neither long nor arduous for one who teaches by routine, who puts just as little of himself into his work as is consistent with keeping his class from drowsiness or disorder, and who limits his daily preparation to a cursory glance over the advance lesson to make certain that there are no points at which he can be caught. Such a teacher may carry twenty-five or even thirty-five hours of class work each week throughout forty-eight weeks of the year, and live to a vigorous

¹ See pages 276 ff.

old age,—but he will not grow perceptibly during all these years, unless it be in his ability to do his work on a minimal expenditure of effort.

Fortunately for the normal school, this type of teacher is in the minority in its classrooms. Most of the men and women in the Missouri schools give themselves without reserve to their work. Many of them take the true artist's view, that whatever one attempts to do must be done just as well as it can be done. Each recitation hour saps the energy of such teachers and the close of the day finds them limp and exhausted. There is neither time nor strength for the preparation that they should give to the work of the next day, —not preparation in the narrow sense of reviewing one's subject-matter for the next assignment, but preparation in the broader sense of searching diligently for new light, of reorganizing and replanning the structure of one's teaching, of working out new problems and providing illustrations that will appeal to the class in part, at least, because they are fresh and interesting to the teacher himself. This preparation, too, should not encroach upon a reasonable margin of leisure, when the teacher may turn his mind away from his work, and seek the diversion of entirely different activities, or when, if he still remains close to his daily task, he may at least have opportunities to occupy himself with its constructive phases, making, perhaps, an occasional contribution to its literature. The kind of growth that the normal schools should stimulate in their teachers cannot be attained upon the basis of the grueling programs that most normal schools demand at the present time.

SOME FORM OF EDUCATIONAL CRITICISM DESIRABLE

Granted both a more reasonable teaching program and a spirit of coöperation upon the part of the teacher that will make an interchange of visits possible and profitable, there is still need in the normal school for something akin to classroom supervision altho it could hardly be called by this name, since it would be in method and spirit something quite different from the supervision commonly practised in the elementary school. Actual supervision and inspection in the narrower sense might, indeed, sometimes be justified in connection with the work of the younger instructors, but the very qualities that we hope will come to characterize the mature teacher—enthusiasm and capacity for continued growth—presuppose the attitude of the master rather than the attitude of the apprentice, and the self-respect that is inconsistent with the feeling of subservience when one is made conscious of having a “superior,” actual or assumed, constantly prying into the details of one's work.

AN “EDUCATIONAL ADVISER”

What is needed, then, is not the “inspector” or “supervisor,” but a colleague for critical tho friendly counsel; the term “educational adviser” expresses the desired relationship. Such a person should not be looked upon by the instructors as a superior. It would be his duty to study the work of the school and to call the instructors into conference for the general discussion of educational problems; individual criticism

should probably be given only on the invitation of the teacher himself. Where authority is needed to carry thru some desirable reform in the work of the school, it should be gained by faculty action, and where personal discipline is necessary, the administrative authority of the school should assume the duty.

It is clear, then, that the functions that we have in mind for the adviser cannot often be successfully discharged by the president of the school. The president is necessarily in a position of administrative authority and responsibility, and it would be difficult for him or for the teacher to forget this fact in the essentially coöperative work contemplated in this proposal. Nor is it in any way derogatory to the normal school presidents of to-day to say that they have not generally been selected with reference to their expertness in teaching or their ability to advise helpfully with regard to classroom problems. Other things have been significant in determining the qualifications of a normal school president—ability to administer the financial affairs of the school, to meet legislators and win support for appropriations, to make addresses and otherwise represent the school acceptably before the public. All of these qualities are important, but they do not always go with the ability to undertake the delicate task of helping a group of specialized and highly sensitive teachers in the intimate problems of their daily work.

The right type of person could render an important service in this position of educational adviser. He could bring to each instructor the pertinent contributions that his colleagues were making in the solution of similar problems, acting as a sort of clearing house for teaching experience. He could direct the interchange of visits suggested in a preceding paragraph. He could arrange for conferences and discussions upon the various phases of teaching. Further than this, he could do much to ensure a thoroughgoing coördination of all of the courses with a view to the professional goal. It would be an important part of his business to envisage the training process as a whole, and to make certain that each unit was fulfilling its function in the work of the organism. To this end, he should know what account the graduates of the school are giving of their training, and a part of his time each year should be spent in this follow-up work. To expect each of the instructors to visit the schools where their graduates are teaching is out of the question, but the educational adviser could visit systematically and bring back to the instructors detailed reports of the points at which the training had been defective.

The success of the function above described would depend upon the wisdom, tact, and sympathetic attitude of the person engaged. Superior workers in every form of achievement know well the value of candid, intelligent criticism of their productions. The better work they do, the more they appreciate the judgment of keen observers who may perhaps be less competent than they in the particular field, but who for the time being see more elements bearing on the situation than can he who is absorbed in his production. Add to the qualification of general fitness a professional familiarity with education as a whole, a tested experience, drawn from many subjects and types

of activity, of how knowledge and habits best get into students' minds, and our critic becomes an invaluable asset to the school. Sincere teachers crave such help, and an acute and well-informed student of education, possessing the personal gift of winning confidence, would speedily make himself indispensable as an adviser in a group even of the best trained minds.

OTHER SOLUTIONS

If it is impracticable to secure the services of such an adviser, much could probably be done by joint action. A small committee, comprising perhaps three of the strongest and preferably the older teachers, could be chosen in rotation by the faculty itself to undertake this work. This plan would have the advantage of ensuring from the outset the coöperation of the teachers in the enterprise, and if the teaching programs of the members of the committee could be reduced in proportion to the time spent in visitation and consultation, good results would doubtless follow from an adoption of the plan.

Another possible solution of the problem has been attempted in a few of the normal schools. The director of the training department is delegated by the president to supervise the instruction of the normal school teachers. This plan will doubtless work satisfactorily under certain conditions, but as a general procedure it has obvious defects. The director of the training department is likely to have more than enough to do in looking after the work of the practice teachers in the training school. Even if he can spare the time for classroom visitation, the advisability of placing the supervision of the instructors and that of the student-teachers in the same hand is seriously to be questioned.

The general provisions for self-scrutiny suggested in the preceding paragraphs should not preclude similar activity within departments. Members of the English staff, for example, should constitute a committee for the coördination of all English courses. The tendency of the individual instructor to get into a rut in his teaching can be successfully counteracted in no more certain way than by subjecting his material to at least an annual overhauling under the critical eyes of his colleagues. Normal schools generally are weak in departmental organization; the principle of departmental responsibility which means so much to the initiative and efficiency of the individual teacher should be much more clearly recognized. With the provisions for the general supervision and coördination of the class work which have been suggested above, the dangers that might otherwise inhere in too large a measure of departmental autonomy may be greatly reduced.

D. SELECTION AND DISTRIBUTION OF CURRICULA

1. *The Present Situation*

The object of sound administration of a curriculum for the preparation of teachers, as for any other professional purpose, is to put as many individuals as are needed in possession of the best available information and skill suited to their purpose with the smallest reasonable outlay of time and money. Granted an adequate staff and equipment, and such a selection of courses as shall furnish the "available information and skill," the problem is reduced to the creation of such an operating program as shall utilize staff and equipment most completely to meet the known numerical requirements of the schools of the state.

RELATIVE USE MADE OF COLLEGIATE INSTRUCTORS

There is no doubt that the teaching staffs of the various schools are at present worked quite beyond an advisable limit, considering the quality of service they are expected to perform. This appears plainly in the overburdening of teachers with classes, as set forth in another section.¹ Another phase of the situation, and one meriting equal attention, is the extent to which the work of teachers is being utilized. Certain inferences on this point may be drawn from an inspection of class membership.²

The proportion of all collegiate classes in which the membership falls below ten during the regular session in the year cited is thirty-six per cent. Only four departments show a membership of ten or more in two-thirds of their classes. Ten per cent of all collegiate classes have from one to four members. Whatever the cause of this, it is obvious that the schools are at present utilizing far less than half of their available teaching resources. Thirty is a standard maximum for collegiate classes, where recitation and discussion methods are followed, as is the case in the great majority of normal school classes. Laboratory groups may be half this number; lecture sections need of course be limited only by the size of the room and the number of windows and ventilators. To spend the efforts of expert teachers on changing groups of five, eight, or even twelve students is plainly a waste of great seriousness which should be avoided if possible. The appropriations for preparing teachers are too pitifully small as it is, to justify indulgence in any unnecessary expenditure.

CAUSES OF WASTE: DUPLICATION OF CLASSES

The reasons for the present conditions are entirely clear. They are mainly three. In the first place, courses are duplicated from term to term to meet what are deemed to be the exigencies of normal school attendance. Faithful to early tradition, the schools have been unwilling to shape their work either for all or for any exclusive portion of their students in such a way as to require regular and continuous attendance. In its desire for a large enrolment each school has catered to the immediate con-

¹ See page 108.² See pages 436, 437.

venience of the student, tho there are probably few students who could not arrange with careful management to do continuous work, even if at longer intervals.¹ A careful examination of the offerings of the schools for 1915-16 shows that, in the regular session alone, a total of ninety-six, or twelve per cent of all the collegiate classes conducted in that session, apparently duplicated other courses, and could have been consolidated with similar classes in other terms of the regular session without thereby creating sections too large for convenient handling. The actual money saving effected thereby would have amounted to nearly ten thousand dollars. The schools vary considerably among themselves in the extent of this practice; Cape Girardeau has eliminated it almost entirely.

Concrete illustrations are as follows: Kirksville gives a course in "Farm Machinery" to five students in the fall, and again to fourteen in the winter term; "Plant Physiology" to nine in the fall, and again to six in the winter at an extra cost of \$145; "Photography" to eight in the fall, two in the winter, and eight in the spring—an unnecessary outlay of \$240. Warrensburg provides the "History of Mathematics" for four students in the fall, and again in the spring for nine at an extra cost of \$150; "Principles of Criticism" for seven students, and later for five at the same figure; "Poultry Raising" for nine, ten, and eleven students, respectively, at a cost of \$327 instead of \$109 for thirty students at one time.

The illustrations above are drawn from collegiate classes only, since these are the smallest and therefore most expensive. Secondary classes are repeated to a still greater extent, but with less financial loss, as the classes are generally full. The bad effect in these cases is the less striking one of arbitrary, incoherent election. Even students continuously in attendance, instead of taking the course when it would logically do them the greatest service as an organic development of their curriculum, wait until it comes around at a convenient hour, or until certain friends take it, or until it may be given by a certain teacher—a form of "adjustment to the individual" that is of questionable value.

AN EXTRAVAGANT ELECTIVE SYSTEM

The second reason for multiplying small classes inheres in the unwarranted interpretation of the whole elective system as applied to the training of teachers, and the notion that being a college, even a teachers college, involves the same varied and comprehensive educational bill of fare that colleges usually present (too often only in their catalogues). The merits of this question have been fully set forth and discussed in another section, where the normal school offerings in each department have been shown.² The summary of the collegiate offerings there given furnishes the best of evidence in the present argument.

It will be apparent that in the effort to conduct so varied a program the schools cannot escape the conditions indicated above. At many points the proposals are

¹ See pages 301 ff.

² See pages 228 ff. For summary, see table, page 411.

manifestly absurd, as where Cape Girardeau records ninety-one semester hours of ancient languages to be given by one instructor; such impossible pretensions are inexcusable and go far to discredit the academic good faith of the institution making them. Even considering only what the schools are actually able to offer, all would have to combine in one institution to make such an elaborated scheme economically workable, and such an institution exists already in the state university. For the latter, there is reason in an extended program which involves many small classes, for it is the one central feeder for a great variety of professions and educational demands; but the normal school has a single, straightforward aim, and out of a dozen courses needs but the one course best fitted for its purpose. Moreover, when courses multiply in such luxuriance, the real good of the student is bound to suffer. A prospective teacher of high school history could profitably take perhaps thirty hours of history in a four years course. The history he must have includes elementary courses required also of those not intending to teach history. If he receives in thirty hours the best possible preparation for teaching high school history, there is certainly every reason for giving each student with the same destination as good a preparation. To focus the normal school teacher's attention on this—the intensive appropriateness of his curriculum for his students' future work—is to serve the student and the public; it is also to use the teacher most economically, for all courses apply then equally to all students following the same curriculum. From the point of view of sound professional education as well as of financial economy, there can hardly be a rational defence for the existing elective system of the normal school except as the school proposes to weaken its distinctly teacher-training function and become a "general" college.¹

LACK OF INTERCOLLEGIATE DIFFERENTIATION

The third factor that operates to make an economical administration of the curriculum impossible is yet more fundamental than either of the two preceding. The genius that has presided over the development of the Missouri training agencies has apparently ignored the far-reaching benefit that would accrue to the state thru having the institutions of one section serve the people in another; not to speak of the money saving to be effected thereby. Each school is now as self-contained as tho there were no other similar institution within the state, and with independent boards, strong local feeling, and no real interest in the problem on the part of some intelligent central authority, the case could scarcely be otherwise.

Here is the situation. Rural and graded elementary school teachers of all types are needed in fairly constant numbers in all parts of the state. These it is, of course, the

¹ The institution at Cape Girardeau has avowedly taken just this step. It is a principle of the school that there is no fixed minimum for class membership; that the teachers will do everything for a single student who desires a course. We find, therefore, cases like the following: A twelve weeks class in Caesar, two students, at an expense of \$42 each; in Ethics, two students, \$35 each; in Analytic Geometry, two students, \$36 each; in Bacteriology, two students, \$54 each; in Spanish, one student, \$68; while students in classes of reasonable size are receiving their instruction from one of the best-paid teachers in the school for \$5 or \$6 per term. It is noticeable, however, that these smallest classes, usually the most advanced, do not in general receive the best-paid instruction; that is too expensive even for Cape Girardeau.

primary duty of each normal school, so far as possible, to supply. As shown elsewhere, however, the public schools annually draw large numbers of high school teachers of various subjects, some directly from the elementary grades below them,¹ some from the normal schools, some from the university, and some from outside the state. As more and more specific training has been made available and necessary for these various specialized types of secondary instructor, it has been tacitly assumed by the normal schools and admitted by the state that each institution was to expand its facilities for all the types of training that any other institution offered. This has been a matter not of demonstrated need, but strictly of sectional pride; it was felt to be unfair for one institution to present more, or more varied, courses than another. Thus special equipment has been acquired by all the schools for collegiate work in the industrial arts, in fine arts, in household arts, and particularly in agriculture. When once these departments have been installed, the way is open for their development to any extent for which funds can be secured from the legislature, unless a fixed policy of joint administration is determined upon.

Against any considerable development of these and certain other departments, however, the economic situation has erected an effective barrier. Students in any numbers hesitate to undertake long training for positions as agricultural supervisors, for example, when there may be fewer than half a dozen such openings in the state each year; and for the same reason schools scarcely feel at liberty to urge students into such courses, unless, indeed, as has here and there occurred, they forsake their exclusive purpose of teacher-training and, in order to enlarge the department, throw it open to all who for any reason desire to study agriculture. It is safe to say that after the elementary courses, which may be desirable for all teachers, have been provided, there is not in all Missouri a demand more than sufficient to exhaust the product of one good normal school in these various branches; to maintain five at the present expense is extravagant and leads to the conditions already noted — few students, small classes, many omitted courses, partly utilized teachers, and, in general, nerveless and fleshless departments.

CONCENTRATION OF ADVANCED CURRICULA IN LATIN

For example, teachers of Latin and Greek could be trained far better and certainly at much less expense if the advanced work in those subjects were given only at Springfield, where it is at present best developed. When this department was visited at Kirksville, two classes were found reproducing rural school conditions in that the two students in one class recited while the one student in the other was at the blackboard; then they turned about. At Maryville, of two students enrolled in a Cicero class one had dropped out; in the Vergil class a single student was preparing to go to the university. At Cape Girardeau, a class of eight in beginning Greek had been collected. It was said to be the first Greek class in six years. The next year it had disappeared entirely

¹ This source is now nearly closed, owing to rulings of the state department requiring specific preparation.

and no Greek whatever was taught, with the result that this first year's work was probably almost a total waste of time to these eight students in so far as their training at Cape Girardeau as teachers of Greek was concerned.

The total cost of all collegiate¹ instruction in Latin and Greek for 1915-16 in the five schools was \$3514. The instructors received an average of \$1676 each; two hundred forty-six collegiate grades were recorded in forty classes averaging six students each.² The college work given covered three years at four schools and one-third of a year at the fifth, Maryville. Had this work been concentrated in a well-organized three-year college curriculum at one school, it could have been done in nine classes averaging twenty-seven students each, and would have required, in the three terms of the regular session, but one teacher working at a weekly maximum of fifteen hours, instead of six teachers working twenty, twenty-five, and thirty hours as at present. This teacher could have been paid \$3500 instead of \$1676, and could have had the summer free. Or the same work could have been done in eighteen classes of fourteen students each, covering the four terms of the year as now; this would have required the time of one instructor teaching fifteen hours weekly and half the time of another, and they could have been paid at the rate of \$2362 per year.³ In either case the total result would have been far better aside from the improvement in classes, hours, and salaries. A department of this kind would have no apologies to make to any college or university; it would be a going concern commanding the respect of superintendents everywhere.

CONCENTRATION OF ALL HIGH SCHOOL CURRICULA

The situation with respect to Latin applies in some degree to practically all high school subjects. Every teacher needs some history, but a specialist's curriculum in history need not be provided at each of the five schools. Besides, but few normal-trained teachers in the state teach high school history alone, and that usually after years of experience and promotion.⁴ Schools that prepare high school teachers of history must, therefore, count on giving preparation in at least two subjects to each candidate. Were the schools to pool their resources and each accept certain subjects or combinations of subjects for special emphasis, the need would be well and amply met. On this basis we would have schools *A* and *B* preparing all types of elementary teachers and also offering full curricula for high school teachers of history, English, and possibly of modern languages; while school *A* might offer in addition an advanced curriculum in

¹ Kirksville, Warrensburg, and Maryville rate (1915) as collegiate all instruction in Latin beyond the second year; Cape Girardeau and Springfield include the third year as secondary work. The latter rating has been followed here.

² Kirksville, 9 classes, averaging 5 students; Warrensburg, 9 classes, averaging 6½ students; Cape Girardeau, 11 classes, averaging 7 students; Springfield, 10 classes, averaging 5½ students (omitting two summer teachers' classes of 36 and 38 students); and Maryville, 1 class with 6 students.

³ Under present (1916) conditions of teaching load (twenty-five hours) and salary (\$1676), such consolidations would have saved the state over two thousand dollars in the year in this department alone.

⁴ In the inexperienced group of 1915 (159 out of a total including over ninety per cent of all existing positions in the state at large), only seven of those who taught but one subject came from the normal schools: three women taught English, two household arts, and two men taught mathematics.

fine arts and music, and school *B* similar opportunities in Latin and commercial subjects. Schools *C* and *D*, on the other hand, would give all of the necessary beginning courses needed for their groups of teachers, but would confine their advanced curricula to mathematics and science, with a special curriculum in *C* for agriculture and in *D* for household arts. School *E* could be assigned special curricula in physical training and in other subjects as they developed. In this way any student would find at some normal school in the state, or at the university, a curriculum in any desired subject that could not well be improved upon elsewhere, instead of five impoverished centres vainly struggling with a weak dilution of everything. More travel might indeed be necessary for some students who were sure of what they wished to study. For the majority, however, the program at any one school would present sufficient variety to allow for personal adjustment on the part of those who might attend from the local community.

ADVANTAGES OF DIFFERENTIATION

This principle of differentiated effort is the only practicable remedy for the situation confronting the Missouri schools, and would long since have been applied had an active central board or single educational authority been in charge to resist local pressure and enforce a wise coördination. The results accomplished elsewhere, in Massachusetts, in Wisconsin, and in New York, for example, have been notably successful and worthy of imitation. There is no reason why the normal schools, because they serve small towns and small schools, should serve them in a small manner. The service they render should be respected and acceptable in St. Louis, Kansas City, or anywhere else. If a candidate can take but a two-year curriculum, he should be assured of obtaining the best as far as he goes. This is plainly impossible now. The very size of their avowed program confuses the schools. With insufficient demand, insufficient students, insufficient funds, and insufficient staff to conduct all departments well, they are bewildered as to what they shall do, lest to develop fully any particular field may be construed as relinquishing their claim to develop all others with equal success. To keep up an appearance of expansion, a school is tempted to injure its basic courses; one school during two recent years sacrificed funds that should have been used for sorely needed books, to build a greenhouse! All have experiment farms, but fine tho it is to have them, they serve little organic purpose in the school because the division of agricultural training among the five schools and the university will not justify or permit of the proper development of the facilities at any one point. Country life conferences in the fall and short courses (not in teaching) for farmers' boys in the winter have been inaugurated in connection with such equipment; both produce a genial glow in the community, but have actually little to do with preparing the type of teachers that these schools send out.

These three causes — duplicated courses due to unregulated attendance, parallel courses needlessly multiplied out of deference to the elective idea, and specialized

courses taken by a few students only but kept going for the sake of presenting an unbroken front to students and competitors — are chiefly responsible for the weakness of the present administrative system as it concerns the curricula. They are the natural results of efforts on the part of vigorous and aggressive schools, without losing touch with their public, to embark on all forms of varied modern training for the teaching profession, and to do so independently because neither the tradition nor, until recently, the absolute need for coöperation has existed. The ambitions to this end are praiseworthy in the highest degree, but in their present form or in any conceivable form which present conditions would permit, the efforts to work them out must inevitably be disappointing or disastrous.

EFFECT OF THE PRESENT POLICIES UPON THE BASIC WORK OF THE INSTITUTIONS

The effect of the present policy in lowering standards and wasting money has been made clear in the case of the advanced courses, but the policy is one that cuts both ways. Funds with which to expand the curricula at the top must often be taken from courses at the bottom, and to see that this has been done, one has only to note the size of classes at the large end of the scale.¹ It has been stated that for the usual discussion class in the normal school, thirty members is a maximum consistent with good teaching. During the regular winter session of 1915-16, twelve per cent (fifteen per cent at Springfield) of the classes in collegiate work exceeded this figure, but the proportion rose in summer to thirty-six per cent (forty-six per cent at Kirksville). These excesses are chiefly, of course, in the elementary classes of the first collegiate year where students fresh from high school are receiving their first professional training. The following teachers' programs from three schools illustrate the conditions:

SPRINGFIELD		CAPE GIRARDEAU		KIRKSVILLE	
<i>Subject</i>	<i>Number of Students</i>	<i>Subject</i>	<i>Number of Students</i>	<i>Subject</i>	<i>Number of Students</i>
Psychology	54	Psychology	70	Psychology	71
Psychology	44	Psychology	54	Psychology	31
Educational Psychology	33	Psychology	68	Educational Psychology	37
Educational Psychology	32	Psychology	47	History of Education	77
Educational Psychology	39	Child Study	46	History of Education	45
Sociology	16				
Average Class	36	Average Class	57	Average Class	52

To term the work done in these large groups "collegiate" may not at first appear to be a misnomer, except in so far as overburdened teachers are concerned.² Some colleges using the lecture, test, and examination method have equally large classes without seriously ill effect. This method is, however, expressly disclaimed at the normal schools; these are "recitation" classes in every case, as classes at this stage of profes-

¹ See page 436.

² The instructor at Cape Girardeau did his work in fifteen hours per week; but the other two taught, one twenty-five and one thirty hours.

sional training should clearly be. To expect any teacher to conduct on this plan and without assistance five classes daily, numbering as many students as these do, and that in a period of excessive heat, is to expect the impossible. The work attempted by these three men, if properly handled, would have required the full time of six instructors, even allowing slightly over eighteen hours of work per week, as a concession in view of the numerous repetitions involved. The obligation to furnish competent instruction to this extent should have been met, or else the applications should have been refused. Good administration means this. Instead of creating a staff suitable for the work actually in hand, however, the expansion of collegiate electives as a first consideration has absorbed all of the money that could possibly be extracted.

The same situation appears among the secondary classes with, if possible, still worse excuse. Students less mature than their collegiate colleagues, with weaker initiative and less adaptability to the difficulties of the large class, have actually done their work in the normal schools under conditions that a good high school would not tolerate. Sixty in a grammar class and forty-nine in rhetoric at Cape Girardeau; fifty-six in American history, fifty-two in physiography at Warrensburg; rural school methods for eighty at Kirksville from a teacher with five daily classes averaging fifty-six each; seventy-two in rural teaching at Maryville, one of the teacher's four daily classes;—these are monstrosities of which no good institution should be guilty. Between their small classes in the regular session and their large classes in the summer session the schools waver between illogical and hurtful extremes that argue a desire to exploit their respective opportunities rather than to hold consistently to good educational principles.

2. Number and Kind of Curricula needed in Missouri

The selection and management of professional curricula cannot proceed intelligently without a fairly exact knowledge of the dimensions of the problem to be solved. With proper organization, accurate reports from every teaching position in the state can easily be secured by a state department and worked up year by year into a clear picture of what the agencies for the preparation of teachers have before them. This is more difficult for an outside agency asking for unwonted reports that represent at best only a cross section of the state at a single moment. The returns filed with the Foundation are so extensive, however, that they admit of an approximation to the actual conditions sufficiently close to serve at least the purposes of illustration. They are briefly summarized here not for their absolute value, but to indicate in outline the information which, in much more complete form, should be constantly before the central authority having the preparation of the state's teachers in charge.

TEACHERS IN RURAL SCHOOLS

So far as can be discovered, there were in 1914-15 in Missouri ten thousand five hundred fifteen¹ teaching positions in one-room schools or in rooms containing more than three grades of children. Of different white teachers holding these positions in the spring or fall of 1915, replies were secured from eight thousand two hundred seventy-seven, and on their replies the following statements are based.²

Thirty-six per cent of the teachers were in positions held by them the previous year; forty per cent were teachers with experience in at least one other school, who were new to their positions that year; and twenty-four per cent were wholly inexperienced. Hence, if this group is typical, about twenty-four hundred new teachers are needed annually in Missouri to supply the rural schools alone.

The present deficiency in training is best seen in a brief analysis of this inexperienced group. It is represented by eleven hundred fifty-two teachers, or twenty-four per cent of those replying on the institute blank.³ Leaving out those who failed to state their training,⁴ only seventeen per cent report any work of a collegiate character in addition to a secondary course—usually a year or less in some normal school; all the rest are a secondary product exclusively. Nearly three-fifths come from high schools where twenty-four per cent received less than four years of instruction.⁵ Thirteen per cent received a part, and nine per cent all, of what secondary training they may have had, in normal schools. Four per cent had no training above the elementary school.

Another distribution of essentially the same facts appears in the array of certificates under which this annual army of recruits goes forth. The dependence placed by the state on its third grade county certificate, recently made available for eight years instead of four,⁶ is shown in the fact that nearly half—forty-seven per cent—of the new rural teachers have nothing else. Twenty per cent hold the second grade county certificate, while but two per cent hold the first grade county or any form of state certificate. Eighteen per cent hold the high school training-class license, and from normal schools seven per cent hold the rural certificate and five per cent the thirty-hour certificate; one per cent hold a diploma.

With liberal allowance for schooling from all sources, it is clear that a large majority of this great number who undertake for the first time to teach schools in the rural communities of Missouri are unfit to be entrusted with such a task even according to present low standards of qualification.

¹ This number includes about five per cent estimated to be positions for teachers of more than three grades in graded schools, inasmuch as five per cent of the 8277 replies were of this character. Of "country" schools, as understood by the state department, there seem to have been 9990.

² See note 3, page 361. The statements in this section follow the second group of returns.

³ See note 3, page 361.

⁴ Two per cent.

⁵ About one-third of these attended only one year or less.

⁶ See page 305, note.

TEACHERS IN GRADED ELEMENTARY SCHOOLS

Elementary teachers in graded schools have been considered in three groups: those in St. Louis, those in Kansas City, and those in the state at large. The total numbers of white elementary teachers in these groups are 1789, 779, and 3650,¹ respectively. The corresponding proportion of response to enquiries was eighty-seven per cent, ninety-five per cent, and sixty-four per cent.

The number of teachers reporting themselves as new to their work in St. Louis and Kansas City is, for no apparent reason, extraordinarily small,—two and three per cent. This proportion does not conform to the facts, and may be due to the inclination of freshly appointed teachers to regard their earlier apprenticeship in these systems as equivalent to experience. In the remainder of the state the proportion of change is nearly one-third, as compared with almost two-thirds in the rural group, altho but twelve per cent are fresh accessions and still fewer, nine per cent, are wholly inexperienced. If these proportions are typical, the average teaching life of a teacher in the graded schools of Missouri is about eleven years, and the state at large, outside of St. Louis and Kansas City, requires for annual replacement about three hundred thirty freshly prepared teachers. It is possible that voluntary replies, such as these were, represent most largely the experienced teachers. The uncertainty of interpretation at such an important point as this shows the necessity of requiring a complete inventory of teaching personnel if the problem of supply is to be handled intelligently.

While it is now the exception for St. Louis and Kansas City to employ new teachers without two or more years of collegiate preparation, the remainder of the state is satisfied that half of its new teachers should come directly from secondary study, that one-sixth of them should have taken but a partial high school course, and that only one-fourth of them should have as much as two years of professional training. The great majority of new workers pass first into the intermediate grades and are then presumably “promoted” in either direction. Fifty-six per cent of those outside of the two large cities are obliged to teach more than one grade.

TEACHERS IN HIGH SCHOOLS

Among the classified high school teachers of the state,² ninety-two per cent in all and a still larger proportion of teachers in first class schools responded to the enquiries made of them; at St. Louis ninety-six per cent, and at Kansas City ninety-eight per cent replied. This group of instructors is therefore well represented.

The proportion of change in the group is astonishing. Omitting the two largest cities, nearly half—forty-six—out of every hundred teachers in classified high schools were new to their positions in 1915. Twenty-one of these forty-six were experienced teachers from other schools, in most cases within the state; twenty-five, however, were

¹ In the state at large principals are included among the teachers, as they chiefly are such.

² Including principals.

new: ten of them resuming teaching after an interruption, perhaps for study, and fifteen being wholly untried. The two great cities admit but a negligible proportion of inexperienced teachers into their high schools: St. Louis, one per cent; Kansas City, three per cent. Consequently in so far as teachers for these systems are drawn from within the state, they must get their experience in the smaller centres. If fifteen per cent of the total number of positions is the total number of new teachers required, these would number in 1914-15 about one hundred seventy-five.

The present preparation of this inexperienced group, as shown in the records of one hundred fifty-nine teachers reporting from classified high schools, is all but three per cent in advance of secondary work. Nine-tenths have had more than one year of collegiate work; two-thirds of them have had over two years; and fifty-five per cent have had four years or more. Slightly over one-third ever attended a normal school.

As to subjects taught on first appointment, one-fourth of the number were at work in a single field; with five exceptions these were in first class schools. Forty-six per cent taught a combination of two subjects, and the remainder taught three or, in three cases, four subjects. For men, science stands first in frequency, followed by mathematics, commercial subjects, manual training, and drawing; for women, English is far in advance, with household arts, commercial subjects, mathematics, history, science, and Latin following in the order named. No other subject was taught exclusively by more than one of these new teachers. Leading combinations of two or more subjects are combinations of the above, with the addition of agriculture and history for men and German for women.

HOW SHALL THIS NEED BE MET?

To sum up the situation thus briefly reviewed and to suggest adjustments of the existing facilities to meet it is an undertaking that can be attempted only in broadest outline in view of the meagre information at hand; it is properly a matter for close and continuous study based upon the accumulation of accurate figures covering several years. These do not exist in Missouri at present, hence the element of annual increase or decrease in the number of new teachers required has necessarily been disregarded, altho it is the essential variable to be reckoned with in the administration of a permanent policy. With appropriate data it can be forecast very accurately.

The crying need of the state is plainly among its rural schools. Twenty-four hundred new teachers are required annually. In 1915-16, one hundred three training classes in high schools graduated seven hundred seventy-four teachers, of whom perhaps two-thirds, or five hundred eleven, went into rural schools.¹ Judging from the group of teachers new in 1915, the normal schools may be depended on to reach twenty-two per cent, or five hundred twenty-eight, with some sort of secondary training, while the normal schools and colleges give some collegiate work to over four

¹ The State Report for the preceding year, 1915, page 91, gives 65 per cent as the proportion of the graduates in 1915 who taught in rural schools; no quotation appears in the Report for 1916.

hundred more, tho little of all this training is at present suited to the needs of the rural teacher. These three groups together make a total of fourteen hundred thirty-nine teachers in contact with some professional training centre. Nine hundred sixty-one are left for whom provision must be made. To treble the number now graduated from the training classes would supply these. Certainly an average of fifteen usable teachers from each of one hundred training classes is no very difficult achievement if undertaken seriously.

The general direction that provision for these teachers must take seems plain. The personal interests of those who desire to maintain a cheap and handy employment for their daughters at the expense of the welfare of the whole population, should give way. The rural districts can have what they wish, but are damaging their own future by their short-sighted refusal to legislate wisely on the matter of certificates. The state superintendent should be given power to abolish the third grade certificate except in counties where in his judgment the training facilities are inadequate for a better grade of teacher. The membership in training classes should be increased from an average of eight to an average of from fifteen to twenty by increasing salaries and by the refusal of a rural school license to any new teacher not possessed of a training-class certificate, or its equivalent from a normal school. Training-class certificates should, of course, be limited strictly to rural schools, thereby making the whole class annually available for this service.

To increase the size of training classes is but a temporary expedient, however. Missouri should at once foresee the time when all rural teachers shall be prepared at competent institutions and be ensured as good a preparation as that given a teacher in a city school. The normal schools will eventually be obliged to take over this work, and they can do it if they have the support of suitable legislation. Secondary students should presently be turned back to the high school, thus sacrificing the twenty-two per cent who have been teaching on the strength of this wholly insufficient preparation. To make up for these, students who complete but one collegiate year should be licensed to teach in rural schools only, and the courses required for all such licenses should be concentrated on the problems of rural school teaching. The training should be distinctly better than that which is possible in a high school training class, and graduates should be granted better certificates and should command larger salaries. The schools should do their utmost to make these one-year curricula attractive. Courses not leading to rural school work should be found only in longer curricula, and students taking these should receive a certificate to teach only on their completion.

The median salary of all rural teachers who have attended a normal school is fifty dollars per month, as compared with forty-five dollars in the group as a whole; twenty-seven per cent receive over fifty dollars. To secure an adequate number of teachers at the new standard and under present conditions, a rising minimum salary established by law must keep pace with the increasing requirements. To suggest what these

minima should be is not easy, and involves a hazardous compromise with a much exaggerated "practical situation." It may be said, however, that Missouri would meet, fairly and none too quickly, the most important obligation of any sort now facing her, if within three years every teacher in a rural school were receiving at least one thousand dollars, and within five years at least fifteen hundred dollars a year. For a wealthy state like Missouri this increase is insignificant when compared with the vital importance of what it will purchase.

The new teachers needed annually in graded elementary schools outside of St. Louis and Kansas City numbered three hundred thirty, according to the estimate derived above. This would require sixty-six two-year graduates annually from each of the five normal schools—a number certainly well within the facilities of these schools to provide, assuming that the economic and legislative situation were such as to supply them with students. There must be sufficient salary inducement to attract students and a regulation that will hold them to their curricula. As suggested elsewhere, centres of more than five thousand inhabitants should not be permitted to employ new teachers having less than two years of professional preparation, and as soon as possible the same rule should be made universal. With a regulated qualification the salaries would necessarily rise with the demand, and the supply would soon follow.

The group beginning work in classified high schools was found to number about one hundred seventy-five. Of these the university, either alone or with the help of other colleges, prepared thirty-six per cent, and could easily prepare many more were the positions in Missouri high schools sufficiently attractive financially to allow it. Fourteen per cent came from other academic institutions within the state, and a somewhat larger number came from without. A second thirty-five per cent had attended the state normal schools; often in addition to other institutions. Divided among five schools, this latter number gives twelve to each, which again subdivided among the many different departments at each school reduces the present scheme to an absurdity.¹ As pointed out earlier in this section, the only rational treatment of this situation is to differentiate the work done by the various schools and build up good curricula for training high school teachers at single schools only instead of scattering the efforts among six.

In dealing as above with the inexperienced group of elementary and secondary teachers, it should not be overlooked that these are but a part of the present problem of the normal schools. The schools have continually and properly sought to tempt teachers in service to return and improve their preparation. Assuming that all of the experienced "reëntrants" among the accessions of 1915 to the elementary group had been in normal schools, this would raise their responsibility from three hundred thirty to four hundred thirty-eight. Similarly, by adding the experienced reëntrants, the

¹ Altho reports were received from more unclassified schools than were listed by the state department, only seven new teachers were discovered, five of them prepared by normal schools; ten were experienced "reëntrants," making a total accession group of seventeen.

total of the secondary group would rise from one hundred seventy-five to two hundred ninety-one, of which the normal school's proportion would be thirty-five per cent or one hundred two, about twenty to each school. These increases leave the situation wholly unchanged. The normal schools may always be called upon, especially in vacation sessions, to provide advanced instruction for experienced students who have already completed their basic preparation. Such subsidiary activities, however, altho important, should not be permitted to interfere with the development of systematic curricula for the sufficient initial training of students entering the profession. This is at present the fundamental duty of these institutions.

VIII

OPERATION OF THE NORMAL SCHOOLS

THE following chapter is devoted, except for occasional references, exclusively to the state normal schools. It should not be inferred from this that the city training schools have no problems of administration that merit discussion. The fact is, however, that the training school of the type of Harris Teachers College at St. Louis either never encounters such problems as the independent state school has to meet, or else has already achieved a working solution of them. This is due to the very nature of its situation. Such a school has originated out of specific needs, precisely measured and understood; it operates in full view of the conditions that are constantly pressing, and relentlessly testing its success or failure; it is a constituent part of the organization that it serves, hence its aims are concrete and direct, lost motion and wasteful projects are eliminated, personal vagaries are corrected, and its apparatus is adjusted to a relatively high tension of smooth and profitable performance.

The state schools are not yet so fortunate. They were established in response to urgent but vaguely defined demands assuming promiscuous forms; themselves located in small, often remote, communities, they are at a distance from most of the schools that they are expected to benefit, and have infrequent communication with the teachers they prepare or with their supervisors; as they are independent and formally irresponsible, no one effectually criticises or calls them to account; the way is therefore open to what is frequently erratic and capricious development, heedless of the clear necessities of the field; and ambiguous aims and a relaxed procedure are difficult to avoid. As is shown elsewhere,¹ weaknesses such as these are inevitable under present conditions, but can be readily overcome by better organization—an organization whereby the public schools of the state and the institutions that provide them with teachers may be brought into successful and economical working relations not unlike those that prevail in a good city system, while preserving the many advantages of a freer and more wholesome environment.

A. PRESIDENT AND STAFF

The administration of each normal school is vested in an officer, called a president, who is elected by the board of regents of that school for a period usually of two years at the meeting following the biennial reorganization, when the two newly appointed members of the board take their seats. This officer in turn nominates instructors and assistants for election by the board for one year (two years at Cape Girardeau). The teachers are loosely grouped into "departments;" such departments as are sufficiently large have some informally recognized head, but except in a few minor matters, each individual takes his official directions solely from the president.

¹ See Chapter IV.

1. The President

In respect to his powers and duties the president appears to represent the traditions of the earlier secondary academy or small private college rather than the modern higher institution of size corresponding to the normal school. Except at Warrensburg, and very recently at Kirksville, his domination is absolute. In the matter of appointment, promotion, and dismissal of instructors he is subject to the will of his board; but in regulating the minutest internal affairs he is supreme. From the prices at which a student's used textbooks shall be redeemed to the courses of study and general educational policy of the school, he is sole arbiter. He consults his faculty on many matters, but is never bound by their action, if indeed any action results from their deliberation. He establishes the value of credentials and allowances of advanced standing, determines and referees resident credit, makes and revises students' programs; he looks after the advertising and financial interests of the institution, deals with the board of regents, and labors with the legislature. In short, the normal school president is the school; remove him and the school has no policy; convert him and at once all that is publicly vocal in the institution changes front. He speaks invariably with an impressive collective "we," but he signifies almost exclusively himself.

MODERN CONCEPTION OF A PRESIDENT'S DUTIES

It is true, of course, that most collegiate institutions in America are the outgrowth of a somewhat similar theory regarding the function and responsibility of the president. By progressive, if tacit, delegations of power, however, and by a more and more complete enlistment of faculty coöperation, the first class college long since passed the level on which it is apparently still possible for a normal school to operate. Not to speak of the trivial items easily handed over to a responsible janitor or assistant, all routine contact with the individual student, such as registration and classification, the checking of credentials, the qualification of students for graduation, and so forth, has found its way into the hands of registrars, faculty officers, or committees who thru continued experience quickly become expert in a single aspect of administration.

Two fundamental considerations justify this arrangement. As educational institutions have become larger and more complex, the mass of intersecting relations has made it imperative that the guiding mind be set free for close, detached study of the principles that govern all this and other institutional procedure; that time be provided for abundant outside observation, comparison, and reflection; and that he be so lifted above detail as to serve steadily, without waste or hurry, his main function—to be the inspiring power and illuminating interpreter behind the whole organization. Another reason has been no less potent. A skilful and sincere administrator operates thru principles, and removes himself as far as possible from personal interference with the concrete case. He constantly seeks to refine and correct the principles in the interests of justice and the purpose involved, but he devises the system that requires him to turn his own son over to a faculty committee for impartial treatment

rather than risk the chance or charge of favoritism in personal relations with students. He stands for something that may not be thus endangered, and the fact that petty difficulties of students may be authoritatively threshed out with subordinates who have usually greater technical skill and far less occasion for partisanship adds greatly to his own influence in larger matters.

The curriculum with its related problems is another field that is no longer the closed preserve of the modern college president. While the several departments are allowed great latitude as to the character of the courses that they offer, the curriculum as a whole, the relation of its parts, the allowable combinations of subjects and sequence, are matters that are determined after prolonged and thorough faculty discussion, usually after the prior efforts of a select committee; and the action of the faculty in the matter is final. Naturally, the influence of the president in all this is important, and should be so, for the study of such problems is his special business; but a good faculty contains judgment equal or superior to his on almost any single point, and it is considered the height of administrative unwisdom to risk arbitrary action in matters that should come thru coöperative conclusion, even tho they come thus more slowly.

FUNCTION OF THE PRESIDENT IN THE MISSOURI NORMAL SCHOOLS

The Missouri normal schools, with certain exceptions,¹ are an interesting study in the respects just noted. Administrative perspective is largely lacking; all powers, great and small, radiate directly from the presidents. In one, the president runs the bookstore, revises the registration of every student, and superintends directly the outlay of each penny; in another, the president registers every student in so far as this is physically possible. In the summer enrolment he is obliged to ask assistance. He has recently arranged for aid in checking up each student's record for graduation, but passes finally on each himself, often reversing or modifying the conclusions of his assistant. Tho the state has installed an adequate accounting system in each school, and provided a man to run it, this president keeps a detailed account of his own as before. The institution registers over two thousand students each year and has an annual budget of \$80,000. At a third school the credit records of all graduates for the decade or more that the enquirers studied were laboriously worked out in the handwriting of the head of the institution. Administration of this type can have but one result: the guiding officials impress one as constantly immersed in endless affairs of surprising littleness; the schools seem truncated, lacking clear, fresh, and comprehensive thinking at the top.

The curriculum is originated and developed in the same way except at Warrens-

¹ At Warrensburg, the whole matter of registration, credentials, and graduation has for many years been in charge of committees and a competent dean clothed with the necessary authority. At Kirksville, just as this study was begun in 1914, the administration of credentials and graduation credit was assumed, on request of the students, by a committee elected by the faculty. At Cape Girardeau, the head of the school, tho less burdened with the clerical task than elsewhere, retains all the authority.

burg. Most matters of importance are doubtless discussed in the teachers' meetings, but the proposals of the president prevail or are withheld. At Maryville and Springfield these meetings leave no trace, not even minutes, the proceedings being of the high school type—"inspiration" or instructions. Since 1914 the Kirksville staff has preserved minutes, as is done also at Cape Girardeau, but the teachers have no important power in either school. At Warrensburg, on the contrary, faculty participation in the determination of the curriculum and credits has existed for more than a decade, and with rare exceptions faculty decisions have been final. A careful record is a matter of course.

EFFECTS OF THE PRESIDENT'S PREROGATIVE ON THE SCHOOL

The consequences of the situation just described are important. The headship of a normal school is an almost unlimited personal challenge. Each incumbent desires to succeed. Under present conditions the measure of success is chiefly the size and prominence of the institution; there exists no audit or accounting of the factors governing its inner worth, no check whatsoever on the part of an outside agency in the interest of the state. In the struggle for success, therefore, where every tool is available, it lies solely with a leader's vision and conscience whether he will promote his institution on principles rigorously justifiable educationally, or whether he will manipulate each lever to serve immediate ends; whether he will have the insight to achieve solid growth, or will seek merely to "swell."

The temptation is unfair and well-nigh irresistible. Here, for example, is a new institution set to make its way in a well-disposed community; it needs friends,—active influences to bring in students. What could be more to the point than to gather in promising teachers of the region, give them a few courses, and send them out glowing with unearned and unexpected degrees to boom the school? Their only credential is that the president thought they "deserved" it. Such a proposal, if put before a self-respecting faculty, would undoubtedly be rejected. One reads with comparative appreciation the first report of the first president at another school: "None of these [students] were sufficiently advanced to enter a graduating class, but a few of them are now successfully teaching, while the most of them are still pursuing their studies."¹ Unwarranted use of the presidential prerogative has run like a yellow strand thru the otherwise largely admirable service of some of these men. Appears an attractive applicant—a person mentally or physically plausible who will advertise the school—and mere "requirements" are suddenly dissolved in order to fit his situation, credit is meted out to serve his need, and one more indebted influence is attached to the administration; while some docile girl may weep long on her successive returns after intervals of teaching, at the steadily harder bargain that is driven with her in the interests of "higher standards." The apparently well-substantiated charge of calculated favoritism pursued some of these gentlemen even from their otherwise loyal supporters.

¹ *State Report*, 1874, page 60.

So likewise with the curriculum. An ambitious president has it in his power to inflate his two-year program to a four-year curriculum solely on paper, and to publish it widely in his bulletins. To substantiate the offering, he accepts credits from local college graduates who, for the sake of some professional courses of sophomore grade, will consent to be decorated with an additional A.B. degree. These brilliant examples infect other local products until by dint of much persuasion, "teaching scholarships," summer faculty appointments, and other devices, a "four-year class" is achieved. Whatever the merits of a four-year curriculum in the given school may eventually prove to be, nothing could be clearer than that such a group of students is marshaled at the outset not for their own good,—for they would be far better off elsewhere,—but solely to create prestige.

PERSONAL PREROGATIVE SHOULD BE LIMITED

It is sufficiently obvious that the growth of an important educational institution, on which a state is relying for a just recognition and satisfaction of its needs for adequately prepared teachers, should not depend upon the action of one man, whose motive may range from a prophetic insight to sheer self-seeking caprice. If the school must be wholly autonomous, and if it is to have a faculty worthy of being an instrument of higher education at all, then let the older and more experienced members of the faculty be made jointly responsible with the president for the gradual and sane educational development of the whole. Let at least the internal affairs of the school be conducted on the basis of complete publicity by disinterested subordinate assistants and in accordance with principles thoroughly discussed, understood, and approved by all.

But in a state where six institutions share the aforesaid trust, each doing similar work, often for the same territory, the principle of institutional autonomy is wrong. In the heads of these six institutions the state possesses a group of informed and experienced men whose joint action, taken after long and thorough consideration of all phases of a problem, would undoubtedly be much superior to the isolated judgment of any one of them. To such a group the state could assign the education of its teachers with more assurance certainly than it may now properly feel. The faculties should not be ignored in this. Deliberations in the several schools, either by way of initiative or on reference from a central board of presidents, would furnish a guarantee that necessary reforms would not long fail of proposal, and that all proposals would receive mature study.

2. The Staff

The personnel of the normal school staff has already been described;¹ it remains to set forth the relations of its members to the working organization of the institutions.

From what has just been said regarding the powers of the president it will be

¹ See page 99.

clear that the term "staff" is used advisedly; the instructors in the Missouri normal schools, as at present conducted, do not properly constitute a "faculty." Their relations to the administration are the same as in the average high school or in private, proprietary institutions. They are hired for a specific, limited purpose, and tho they are expected to coöperate in a general way for the good of the institution, and do so, they are under the immediate and complete direction of the head of the institution. Appointment is not in any sense an admission into a select and homogeneous group of scholars jointly responsible for a high educational enterprise. The terms "professor," "associate professor," and so forth, do indeed appear in certain of the catalogues, implying a genuine ranking of the teachers, but they are meaningless except as arbitrary distinctions indicating a possible difference in salary, and are attached in imitation of the collegiate practice. One president made a great point of the "democracy" of his "faculty" meetings in that all instructors were admitted on an equal footing — an equality rather without significance inasmuch as, apart from certain details recently wrung from an unwilling administration, the "faculty" had no power. It should not be inferred that such a group is passive: on the contrary, the amount of group and committee action is large, but it is always under the personal direction of the president and concerns merely the course of minor school affairs.¹

LARGE DEPARTMENTAL INITIATIVE

In the conduct of his own department, on the other hand, the individual instructor has been allowed large freedom of initiative. The duties of examining candidates for admission and of validating claims for advanced standing were regularly referred to the departments involved, until certification was introduced. As these claims were constant with the short-term student body, each teacher assumed a two-fold responsibility: one for the instruction that he gave, and another for the character of the students that he admitted to his classes. Controlling thus the granting of credit in his own field, and lacking serious supervision from above, he achieved a considerable autonomy of action. As long as the course of study remained fixed, and students came to the teacher in normal distribution among the departments, this worked well. Each teacher reflected fairly, with but little variation in standards, the general level of the school as a whole.

EFFECTS OF THE ELECTIVE SYSTEM ON THE TEACHER

The development of the elective system changed this. As worked out in Missouri this scheme of curriculum organization makes the student the measure of the teacher in a sense difficult to justify. Instead of a group of students working systematically thru an orderly plan of training to a definite goal with minds on the content of their subjects, the instructor faces a class composed of individuals who have selected him out of several possible choices that would advance them equally toward their diploma.

¹ As has been previously noted, the teaching body at Warrensburg appears to have larger powers in some respects than is the case in the other institutions.

He knows that in many cases it is solely his reputation with previous classes that has brought them there; he knows that unless that reputation is maintained, that unless his course can be given a savor of modernity surpassing those of his competitors, or unless some other tangible inducement can be offered, his numbers will ebb away to the bare list of those whom circumstances compel to elect his work. The immediate pressure of this fate is felt thru its effect on the purse. Not that one's salary will be reduced or his resignation requested, unless the condition continues. But just as an increase in total enrolment is expected to weigh heavily with the legislators in increasing the biennial appropriations, so it is claimed that the size of individual departments operates directly with the boards of regents in halting or advancing the individual salaries in the schools. Not only one's salary but one's assistants, equipment, class accommodations, and indirectly one's prestige depend on the same factor. This general charge was repeated so often in practically all of the schools, and with such forceful detail, that a visitor could not but be impressed. The lay members of the boards have naturally little else to go by once they discard a president's judgment as sole criterion, and under certain conditions even a president may be partial to a teacher who can attract and hold large numbers.

In such a situation each teacher is faced, as is the president in his larger problem, by a struggle with his conscience as to what is educationally sincere and honest. Many teachers have undoubtedly kept their professional standards high.¹ But in case one is not particular, the first move is to get as much of one's work as possible "required," or if the work is of a nature to make that impossible, it is important to see that as little of other teachers' work as possible is so protected. If faculty discussion and votes will bring this about, a formidable contest may occur periodically, each member lining up in as mechanical a fashion as in any political machine, while the interests of the student in the point at issue disappear completely.² If courses cannot be got on the "required" list, strategy must be used to make them appeal directly. The first step to this end is to admit every one without prerequisite. In the announcements for 1914-15, when this study was begun, genuine prerequisites for any but mathematical and language courses scarcely existed. A member of what is perhaps the strongest department of history in all the schools was asked: "Does your department offer any course in the four-year college curriculum to which you would not admit a 'good husky lad' who is mature and well along in his secondary work?" He replied with a decided

¹ One head of an important department, one of the best trained and most skilful teachers in the state, was found to be leaving because her work had no outlook. She had insisted rigorously on the sequence of elementary and advanced courses with students who came to her, whereas other departments admitted them haphazard; her advanced classes were therefore always comparatively small and her position seemed permanently restricted as to recognition and salary.

² This situation was attested by experiences of members of the enquiry staff at faculty meetings in two schools. In one it was a question of the "outs" reducing the work required in the departments of the "ins" — English and Education — on the ground that the elective departments thus had too little "show." There was considerable feeling, and the votes of the two sides were delivered in a wholly cut-and-dried manner. In the other case the aged and respected head of the Latin department arose, and with tears declared that other teachers had been discouraging election in his department, that it was neither fair nor honorable. Certain disclaimers followed. In neither case was there the remotest reference to the real issue — the actual or probable needs of the student.

negative. Not only are courses themselves thus leveled, but parts of courses, which according to any theory of good teaching should be taken in sequence, are thrown open to free election whenever it may suit the convenience of the student. Thus second or third term English, history, physics, chemistry, geography, and agriculture may find half of the class consisting not merely of students who have had the preceding work in an earlier year, but of complete novices; or a first term class may contain several who have already had the second or third term. Another device is to keep repeating term after term courses that should properly be given but once during the year; this makes the offering of a department seem large, even tho classes are small, and gathers in a few extra students, who otherwise might not attend.

It will be readily understood that under such conditions an instructor is not likely to be too discriminating in his treatment of students. Reinforcing his desire for a large department is the very laudable wish to help belated boys and girls who have had few advantages, or to assist others who "must get thru" because of lack of funds or in order to take a certain desirable position. These considerations are, of course, the only ones that ever become public. Hence arises the temptation to allow credit for merely nominal work: a student claims to have done this or that under the direction of the rural school teacher in his vicinity, and without real examination is allowed credit, particularly after reading an extra book or two, or writing a "paper;" written work done for another course or in another school, and already credited there, may occasionally be allowed to count; when but one or two register in a class, whole courses may be credited on the basis of work done chiefly in private and with every possibility of excessive credit. Where each item of credit is important in making up the main account, it is not surprising that a student goes where he can get it most easily, and the teacher who is most liberal becomes perforce the popular choice. The declaration: "It is easy enough to save time here if you know how to pick your work" became a familiar confidence from students prone to think of the course of study as more or less of a bargain counter.

There is no way of telling precisely how widespread such practices are. They certainly exist to an extent sufficient to provoke the deploring criticism of such teachers as are accustomed to better standards, and it is evident that the present elective system, together with administrative laxity in matters of credentials and examinations, gives them every opportunity and encouragement. Furthermore this competitive attitude leads naturally to jealousy of any agency set up to deal quickly and efficiently with student needs. Where a registration committee exists, its members are suspected by their colleagues of guiding students so far as possible into their own elective courses; where the president controls the registration, the possibility of such jealousy arising is a strong deterrent from effecting a rational distribution of duties. At Kirksville the system of student advisers was opposed by some teachers lest their departments suffer. As a compromise it was provided that the new student choose his own adviser out of a wholly strange staff, and that relations begin *after* registration; that is, after the student's chief need was over!

PRESENT TENURE OF POSITION UNJUST

As has been said, the normal school instructor is appointed by the board of regents for one or two years on the nomination of the president. This term of tenure, as well as that of the presidents, is stipulated in the law, and is probably due to the fact that the board itself is reorganized with each biennial renewal of two of its memberships. As a principle of institutional management it is fundamentally bad, its only alleged justification being that it is the easiest method of completely cleaning the slate for a fresh start. Inasmuch as there are no conceivable circumstances when such a process is necessary or wise, the effect of the arrangement is to turn the service of excellent public officers into a series of staccato spurts punctuated with threats. "Good behavior" is, of course, the actual term of office in most cases, and it should be so expressed. To inform an undesirable instructor that he will no longer be needed, and to show him why, requires only more intelligent courage than to refuse him a renomination. The trouble incurred in a few cases is a small price to pay for the establishment of the successful teachers in a position of security that cannot fail to result in substantially better work. Few teachers whose positions are subject to annual revision will plan the growth of their departments with enthusiasm for a large and distant purpose. The public that wipes out the list each year and reappoints as a favor instead of as a right must rather expect that teachers, as well as presidents, will, if possible, do the immediately spectacular thing to catch the eye and ensure the next election. Growth thus becomes a matter of short, feverish, and often conflicting efforts for recognition instead of a wholesome, harmonious development of the school.

Missouri normal school teachers are elected in May. This is the practice in many educational institutions, but more from force of habit than because of any special advantage. President Baldwin of Kirksville pointed out as early as 1875¹ that such elections should occur in December, when the necessary data, at least in so far as old teachers are concerned, are as available as they are at the very end of the school year. There is every reason to adopt this suggestion. If teachers must be elected annually, they should be definitely assured of their positions at the earliest possible moment. It is a wholly unnecessary injustice to hold academic folk who are dependent upon seasonal appointment, in suspense until their chances for employment elsewhere are gone or greatly reduced. To ensure a good choice, new teachers must be engaged whenever they can be secured; granted a competent president, the only rational policy is that of colleges of good grade, namely, to make the president's selection equivalent to an appointment.

A further reason for appointments early in the year applies especially to conditions as they now exist. Elections of the major portion of the staff, if occurring in January or February, would be confirmed by relatively experienced boards in all cases. Under the present arrangement, whenever board appointments are made for a purpose, that

¹ *State Report*, 1875, page 45.

is, to oust a president or certain objectionable teachers, the newly reorganized board, meeting first in March or April, with usually two, and possibly three or four, new members, feels compelled to take hold and overturn things at once. Were they obliged to wait until the following school year, the intervening contact with the school and its personnel, as well as with public opinion, would certainly result in added discretion for meeting the supposed crisis, and abrupt upheavals, which have been the bane of some state-controlled institutions, would be less likely to occur.¹

LEAVES OF ABSENCE FOR STUDY OR EXPERIENCE

Leaves of absence for study may be taken by teachers practically at any time desired, if the necessary arrangements can be made for handling the absentee's courses. The boards are uniformly generous in holding open his position, but he is under no obligation to return unless he wishes. At Springfield the further step has been taken of supporting for three months, in return for each three years of service, a teacher who is absent for study. The apparent excellence of this plan is marred, however, by the fact that such a teacher's absence is usually at the expense of his colleagues, who are asked to assume his courses, no substitute being secured. One naturally objects to profiting on these terms, which are a palpable injustice to all concerned. That every teacher should make adequate provision for regular periods of uninterrupted study, or of travel and observation, as the case may require, will some time be as definitely demanded as is now a considerable initial training. It is a matter of ensuring sufficient high reservoirs of power to make the daily flow spontaneous and forceful. It is not likely, however, that under present conditions, provision for this can be expected solely from the teacher. The same arguments that are urged in favor of contributions for retiring allowances apply here with double force, for the present vitality of the school is directly involved. It would not be unreasonable to expect each teacher to put aside annually a given amount of his salary for use in a periodically recurring year of study, the school contributing the major share of the expense and releasing him at as frequent periods as the nature of the arrangement would justify.

Another similar obligation of the school toward its teachers is to secure an intimate, oft-renewed familiarity with the conditions of teaching, particularly in the district or region served by the institution. This need is two-fold. To be successful guides, teachers must have fresh conceptions of the conditions in which their students are to work. These can be obtained by frequent visits among the schools, and by talks with returned graduates. In each of two successive years Maryville has conducted a complete canvass of its district, sending its teachers from school to school to study the situation of each teacher and to ascertain peculiar needs and problems. This in some form should be a constant feature of every normal school's annual program. But

¹ The removal of the president at Warrensburg in 1915 is a case in point (see page 47). The new board fell on its prey at its first meeting, when the new members had had no opportunity whatever to become familiar with the real situation for themselves. It is at least doubtful whether affairs would have taken the same course after nine months' acquaintance.

the greater need is different. Most normal school teachers have had some experience in teaching elementary or high school classes before doing normal school work. As the latter duties fill the horizon this experience fades rapidly into a dim background; subjects and methods of approach change, and a teacher ten years out of elementary teaching may easily be a complete stranger in a rural or graded school. The problems have become theoretical and academic, and have lost their grim and vital aspects. To prepare successful teachers, a normal school should not permit this. Each instructor should be able to convince the student that he can feel the problem vividly, and that he understands how to teach children now. Much valuable experience for this purpose could be acquired in the local practice school, but this is rarely done except by professional supervisors. At best it is a hothouse reproduction of the real school; usually better, certainly not the same. A supplementary plan, which every normal school could adopt to a greater or less extent, would give each teacher a frequent turn of a week or more in a neighboring school giving some instruction himself, studying the other teachers to observe how well the normal school was doing its work, noting needed modifications, and in general establishing direct and stimulating relations with the school. From not a few schools it would be entirely worth while to bring in exchange a first class teacher to the normal school for a similar period to discuss practical problems with young students there. An interchange of this sort would keep schools and training college together in close sympathy, and would make a fossilized faculty impossible.

ADMINISTRATIVE USE OF PROFESSIONAL TRAINING

An account of the general training of the instructors in the Missouri normal schools has already been given.¹ It is important, however, to note how the directors of these schools utilize the training of their teachers from an administrative point of view. The questions as to which departments deserve the best trained teachers, which departments shall carry the highest salaries, what distinction as to training and salary shall be maintained between collegiate and secondary teachers, what use shall be made of student-teachers, and finally what modifications in standard, if any, shall be allowed for summer instructors — all of these are considerations for which the administrative officer must find a practical solution.

DEPARTMENTAL DISTRIBUTION OF TRAINING

So far as amount of basic training is concerned, the academic groups are not sharply distinguished one from another.² Of sixteen teachers of mathematics, two had a two-year diploma only, and one had none. Agriculture, history, and science have fared a little better: of thirty-nine teachers in these subjects, only one held a two-year diploma, and but one was without a diploma. If the institutions where the training was secured be considered, the teachers of foreign languages stand highest, with eighty-two per cent of their number from first class schools; household arts, history, and agri-

¹ See page 99.

² See page 421.

culture are also relatively high. Foreign language teachers lead also in amount of advanced study.

It is the relation of professional to academic subjects that possesses the chief significance. Only three-fifths of the teachers who deal with the special subjects peculiar to the normal schools have a training of four years or more, while ninety-three per cent of the so-called "academic" teachers have collegiate degrees, forty-one per cent having graduate degrees as compared with nineteen per cent in the professional group. The disparity is still considerable even when the supervisors are separated from the regular teachers of education, but no rational view of teacher-training will acknowledge the justice of such a separation; instructors charged with the supervision and criticism of students in their first actual teaching experience should be no less thoroughly prepared than the best in the school. In the quality of their training, furthermore, the instructors in education are noticeably behind their academic colleagues, having one-fourth fewer degrees from high grade institutions.

To a critical judgment it would appear that if contrast must exist, these relations should be exactly reversed, altho there is no reason why every teacher should not be required to possess or obtain an adequate training. It may be asserted that the supervisors and those similarly selected have the equivalent of a standard training in their field; that they are chosen for practical experience and skill, and that a degree would mean little or nothing in their cases. That this is the theory is evident, on the whole, by reference to the salaries paid the two groups.¹ The average salary paid to women supervisors is not greatly below the average for women in all academic subjects, and the average for men teaching education is second from the top. The status of the education department, therefore, tho far from foremost, is apparently intended to be about the same financially as that of the others. This being the case, the policy pursued in relation to the training required seems a mistake. The fact that they are "practical" chiefly is a dangerous recommendation for teachers in this department of all others. Practical experience is wholly indispensable, but in a field that is only just seeking to make good its prerogatives, a field whose workers should, by sheer weight of ability, dominate the schools they serve, a thorough general education is of coördinate importance. Throughout the country, speeches, writings, and classroom performances of a slovenly and almost illiterate character have been perpetrated in the name of "education" by persons indebted only to "practical experience." Crude "surveys" and "experiments" are submitted as scientific contributions. These offerings not only seriously injure the cause of specific training among educated people, but they are worse than useless in their immediate effects. Better for every purpose the intelligent reactions of a liberally educated mind innocent of "methods" than the undisciplined "professionalism" that comes from half-educated instructors. Missouri appears to have less than its share of such lapses among its professional corps, but the tables should be completely turned in the other direction.

¹ See pages 285, 424.

Before leaving the general topic of departmental training it may not be out of place to indicate certain facts as to experience and tenure. Just half of the academic teachers have taught in normal schools for more than five years. Among teachers of education only two-fifths, and among the supervisors but one-fourth, have had so much experience; one may conclude, therefore, that instruction given by the professional staff is on the whole less maturely developed than that in academic departments. In looking thru the early catalogues one is impressed with the number of teachers of education who appear to have been drawn directly from superintendencies without special training in education. In the present corps of fifteen men teachers seven were of this sort, while seven had supplemented their administrative experience with special training; only one had had no administrative experience.

DEPARTMENTAL DISTRIBUTION OF SALARIES

A table in the Appendix¹ presents an array of departmental salaries, the details of which will be of interest chiefly to the individual schools. All instructors are included who received an annual salary of \$800 or more. In so far as salary can measure the quality of instruction, the table may be considered as a scale of the values attached by the school authorities to the work of the respective departments.

At Kirksville it appears that professional instruction draws, on the average, one hundred dollars less than academic instruction; at Warrensburg the difference is over two hundred dollars, while at Cape Girardeau it is but seventy dollars. Springfield, on the contrary, pays its professional department about one hundred dollars more than the others, and Maryville shows a similar tho smaller balance. The second would appear to be the truer policy, provided the difference represents an actual balance in weight of ability. As already indicated above, it is impossible to have a first class training school for teachers when the professional department is of relatively inferior calibre; and the salary account usually measures this with fair accuracy.

The relative value assigned to the various departments by the normal schools as a group appears best when the average salaries are arranged serially as shown by the table on page 285. This table makes clear the remarkable fact that financially the teaching of pure science is given the highest rating in Missouri normal schools; while if the different scale of payment for men and women be taken into account, the Latin (!) teachers are the best paid of the men, and share first place with teachers of mathematics among the women. The average salary of instructors in education stands fifth in a series of eleven groups, and if the supervisors were included, it would stand sixth (\$1505). The cost of critic supervisors by themselves is next to the lowest, and even among the women rises only to the middle of the series. It is true, to be sure, that the courses in education draw upon many departments, as well as upon the supervising staff, but these courses are the distinguishing characteristic of the institution and should obviously be given by the best instructors obtainable, who will, in general, be

¹ See page 424.

RELATIVE IMPORTANCE OF DEPARTMENTS AS EXPRESSED IN THE
ORDER OF AVERAGE SALARIES

<i>Men</i>		<i>Women</i>		<i>Both Men and Women</i>		<i>Numbers of</i>	
	<i>Av. Sal</i>		<i>Av. Sal</i>		<i>Av. Sal.</i>	<i>Men</i>	<i>Women</i>
Ancient Languages	\$1868	Ancient Languages	\$1420	Science	\$1735	17	0
Education	1773	Mathematics	1420	Ancient Languages	1676	4	3
Science	1735	Modern Languages	1400	Agriculture	1644	11	0
Mathematics	1711	Education	1341	Mathematics	1635	20	7
Special Subjects	1711	English	1336	Education	1573	22	19
English	1657	Supervision	1335	Government, History, and Geography	1542	29	8
Agriculture	1644	Government, History, and Geography	1335	Modern Languages	1483	3	4
Government, History, and Geography	1599	Household Arts	1301	English	1464	14	21
Modern Languages	1593	Special Subjects	1197	Special Subjects	1425	20	25
				Supervision	1368	1	31
				Household Arts	1301	0	11
Extreme Variation	\$275		\$223		\$434		

those most highly paid. If the best-paid teachers are unable to give these courses, something is wrong, and the school where this is true is not what it purports to be. It is certainly far from being a mere coincidence that in the school at Springfield, where the relations of the education department appeared to every member of the enquiry staff to have been most satisfactorily worked out, the professional group should be receiving more, on the average, than the academic group, even tho the maximum salaries were surpassed in other schools.

SECONDARY *versus* COLLEGIATE INSTRUCTORS

In spite of the wide field of instruction ranging, in all five Missouri normal schools, from the first year of high school to the fourth year of college work, the distinction between secondary and collegiate instructors has not been drawn.¹ There is indeed a consistent difference in average salary as the college work increases. But the number of teachers doing college work alone is so small, except at Kirksville, that a significant contrast could be found only between the group having chiefly college work and the group having chiefly secondary work. Here the average salary of those men having more than one-half of their work in college classes is about four dollars more than the average salary of those most of whose work was in secondary classes; and about the same thing is true of the women. As marking a distinction between a secondary and a collegiate grade of work, such a difference is hardly important. The average salary of the ten women doing some secondary work is thirteen dollars more than that of the two women doing college work only.

Much the same situation appears if the comparison be made from the standpoint of training. For example, inspect the secondary and collegiate student term-grades

¹ See page 425.

reported by the thirty-two men and nine women who hold masters' degrees or higher, from institutions of the first class, or a similar distribution of classes taught by them in the school year ending with August, 1916.¹ These groups of best prepared teachers are, it seems, finding from twenty-eight to forty-five per cent of their classes in the secondary field, and the total grades reported follow closely the same figures.

From the point of view of good administration the above facts are as conclusive as any that could be cited in determining the character of the work done in these schools. Teachers that are continually and largely busy with the secondary phases of instruction, especially when their programs call for twenty or twenty-five class sessions per week, are in the very nature of the case unfitted for what all collegiate experience requires of college teachers. They are undoubtedly much above the average of high school teachers; they are quite as certainly below the standard of the collegiate institutions with all the years of which they now claim to compete.² In respect to teaching ability, their training, their environment, and the very fact that they deal so constantly with elementary situations probably do and certainly should enable them to outrank the younger college teachers. But to expect that with their present mixed and overloaded programs they should be qualified to conduct advanced instruction suited to the junior and senior college years would be absurd. Any one familiar with the real situation knows that with several exceptions they are not so qualified, and that the four-year collegiate curricula have been built up out of a multiplicity of beginners' courses. Conditions cannot be good until the collegiate instructors are such in training, program, salary, and performance. As recommended in another section, if lengthened curricula are to be offered, or even if first class work is to be done in the one and two year curricula, the teachers who have been appropriately trained should be relieved of secondary work and placed in their proper fields, while those who are essentially secondary teachers should discontinue collegiate instruction.

PART-TIME AND STUDENT ASSISTANTS

The policy pursued with reference to part-time or student assistants giving instruction during the regular session is fairly consistent in all of the schools except at Kirksville. At Cape Girardeau no such assistant was employed in 1915-16; the authorities of the school are definitely opposed to the practice. At Warrensburg three were used, one for one term to teach a class in secondary geometry; one for the year as a supervisor; and one in industrial arts. At Springfield there was none. At Maryville

¹ See page 425.

² The schools, from the early catalogues down, have made a great point of the fact that their high school students, and even the "sub-normal" pupils, have had the advantage of the "best teachers" in the school. This has no doubt been very fine, but it appears to have completely escaped attention that the instruction of college students at the other end of the ladder must necessarily be correspondingly impaired. The other point urged in favor of the present policy is that advanced teachers should "keep in touch" with elementary and secondary instruction. This is not to be disputed. It is one thing, however, for such a teacher to take a genuine elementary or secondary class daily, weekly, or occasionally, for demonstration or practice; this is indispensable for every effective instructor of teachers. It is obviously a wholly different thing for "college" teachers to be loaded down with nondescript secondary classes, the like of which exists nowhere else, and which serve no purpose of illustration to students or of practice for the teacher himself.

one woman taught two classes in secondary mathematics, and one gave an hour a day as assistant in domestic art.

Kirksville has for many years followed a different plan. Juniors or seniors in the four-year college curriculum have been employed for small fees in one or two classes each throughout the year. In the regular session of 1915-16 there were nine men and six women, making in all fifteen such teachers, who received from \$10 to \$50 per month for their services, eight drawing \$25 per month or less. Four were in the department of manual arts, and four taught music; the remaining seven were given classes in Latin, history, German, agriculture, photography, commercial subjects, and school management. Except for one who taught beginning Latin and another who taught rural school management, all conducted classes attended by college students. During the year these fifteen student-teachers reported three hundred eighty-two student grades in college subjects, three hundred thirty-eight grades in subjects open to both college and secondary students (manual arts, music, and so forth), and three hundred fifteen grades of secondary students. It is clear that the major work of these teachers was with college students.

The ground on which the employment of student assistants may be justified is chiefly that such employment furnishes needed financial aid for students wishing to continue their studies; and the supposition is that the advanced studies they desire to pursue are of a nature to warrant their attendance, while the work for which they are paid is presumed to be of service. The apparent advantages to the school incidental to such an arrangement are important, as many a small college yearning for students has discovered. They are two-fold: first, the services of such instructors cost but little. The aggregate weekly class hours per quarter handled by the fifteen teachers at Kirksville numbered three hundred, or the equivalent of nearly four teachers working to the Kirksville standard of twenty periods per week for the full eleven months. At the Kirksville average of \$1591 for academic instructors these should have been paid \$6364, whereas they received less than that by \$2712—not far from the salary of two full-time teachers. Such saving enables the school to relieve regular instructors for a larger offering higher up in the curriculum, where these same part-time teachers become the students, thus realizing the second and more important object of the plan. Every institution desirous of enlarging its scope, whether it be a four-year college seeking to add graduate work, or a two-year school seeking to develop collegiate status, has difficulty in attracting and retaining voluntary advanced students when its faculty and material facilities remain practically unchanged. Recourse must therefore be had to other means, one of which is to subsidize capable graduates to take the first and second year courses they have not as yet had, together with what advanced work can be laid out by a teacher freed by their help in lower classes. This nucleus attracts others. Such “pressure” for these courses is presently discovered as to require more teachers, and the four-year program is shortly in full swing.

Two objections make against the wisdom of a policy of this sort. There is every

probability, in the first place, that longer attendance at the school for further study is not in the best interests of these teacher-students. They have finished their course, and should now be directed where genuine advanced courses are available under instructors who have had advanced training for that purpose.¹ A certain type of student has to be protected against himself in this respect. His inclination is to remain in familiar surroundings, to his eventual detriment. The school should here consult the ultimate interests of its graduates in their preparation for public service. The second consideration is still more obvious. The use of partly trained and inexperienced teachers in lower classes as a lever with which to lift the school is plainly opposed to the real interests of the major portion of the student body, who for years to come will be found in these lower grades in which the main function of the institution centres. First class teaching of these students should be guaranteed at all costs and at every point. The school's contact with the great mass of them is brief at best; for hundreds it is but a single year. What shall be said, then, of a policy that introduces student-teaching at this point in order that the beneficiaries may be induced to remain for a junior and senior year, while the regular instructors are relieved from the service of the elementary teacher in order to lengthen the curriculum for the sake of the few who are preparing for high school and administrative positions?² The lengths to which the expense of this elaboration at the top without corresponding financial support may drive the administrator are illustrated at Kirksville in the department of manual arts, where for a prolonged period a student-teacher on corresponding salary was given full charge, and while thus in charge received credit toward his degree for "practice teaching," notwithstanding the fact that no one was in a position to supervise his efforts save the head of the institution.³ This use of advanced degrees to pay for instruction is effective in creating "degree classes," as the experience at Kirksville shows, but it is not education.

INSTRUCTORS IN THE SUMMER SESSION

The problem of securing instructors for the summer session is a critical administrative concern. The question is not so much one of finding people who will teach. The colleges and universities are generally closed, and both their advanced students and their teachers are available; superintendents of schools find a lull in their work and can often be had, while graduate teachers who work during the winter in the schools come flocking back. The main problem is to find teachers of requisite experience who

¹ This is not to be construed as meaning that three and four year curricula should not be offered. As explained elsewhere, the point is that such curricula should be offered only by fully qualified teachers to students fully prepared to take them.

² The school in question has been pronounced in its condemnation of inadequate training for elementary teachers. To quote its *Bulletin* of December, 1910, page 9: "It is due to artificially created conditions, largely to arbitrary university domination, that the abnormal and wasteful discrimination has been made whereby advanced scholarship is required for high school teachers and poor scholarship or none at all for elementary teachers." It is difficult to see wherein its own practice is essentially different.

³ This lack of adequate supervision of student-teachers is a serious defect in the Kirksville scheme. The situation is irregularly handled; some are apparently given careful attention, while others are neglected, often teaching at an hour when their superiors are busy, thus missing them altogether.

have sufficient training in education to fit into such an environment and maintain the integrity of a school's standards. Attendance increases eighty-two per cent, the median age of students rises from twenty in the regular session to twenty-two among those attending only in the summer. With these older students, who are usually experienced teachers, collegiate subjects are in greater demand than before. At the same time, a large portion of the summer attendance is made up of seekers for "approved grades," which can be written in on their certificates in lieu of examination. Many attend only in the summer; many more get their first experience at the normal school in this session.¹ It is, therefore, peculiarly the school's duty to see that each student finds what he needs in the best form in which it can be provided.

TRAINING OF SUMMER INSTRUCTORS

In the summer of 1916 the normal schools increased their staffs temporarily by the employment of fifty men and thirty-one women.² Three-quarters of them were natives of Missouri, and more than four-fifths had their secondary training in Missouri. The median age both of men and women in all the schools together was twenty-nine; at Warrensburg it was twenty-six, and at Maryville thirty-seven.

The policies adopted by different schools appear markedly divergent.³ One school employed college graduates except for one who had attended college without graduating; seven of the ten were from first class institutions, and three held advanced degrees. Four had had normal school training also, three of them locally. Another school secured teachers more than half of whom had only normal school training, and of those who had college or university experience, only half had taken degrees, while none possessed an advanced degree. Only about half of the entire number at this latter school had four-year diplomas of any sort. Nineteen of the twenty-seven had been trained at the school itself.

The professional experience of these summer school teachers ranges from none at all to twenty-six years; the medians run as follows: Kirksville, four; Warrensburg, six; Cape Girardeau and Springfield, seven; and Maryville, ten years. Maryville appears to have used her well-trained special instructors chiefly for secondary students. Springfield employs high school teachers, but uses them largely for the secondary classes, for which they are presumably fitted. Kirksville, on the contrary, turns many collegiate students over to teachers drawn from secondary positions.⁴

It is of interest in the above connection to observe to what extent the subjects taught in the normal summer school correlate with the teacher's work during the year,

¹ Thirty-nine per cent of the year's enrolment in all the schools in 1913-14 attended a normal school for the first time in a summer session. This is nearly as many as begin in the fall — forty-two per cent.

² Thirteen others were employed from whom the facts of training could not be obtained: Warrensburg, seven; Springfield, four; and Maryville, two.

³ See page 426.

⁴ Forty-two per cent of the collegiate student grades (752) reported by the special summer session instructors at Kirksville were reported by high school teachers or undergraduate students. At Warrensburg the proportion was twenty-nine per cent, at Cape Girardeau twenty-five per cent, at Springfield ten per cent, and at Maryville twelve per cent.

the absence of such a correlation is not necessarily a proof of lack of preparation in the subject taught in summer. Correlation either wholly or in large part appears in from forty to eighty per cent of the cases in the various schools. Lack of such correlation is evident when a superintendent of schools who regularly teaches American history is assigned to "General Method" and "History of Education;" when another who teaches high school commercial branches in the winter teaches history in the summer; when a teacher of high school physics conducts a collegiate class in stock-judging. Any single case of this sort of shifting may be wholly explicable and proper; but a large amount of it makes one suspect the continued vitality of the ancient normal school doctrine that "a normal school professor can teach anything."

HOURS AND SALARIES OF SUMMER INSTRUCTORS

The schools vary considerably in the extent to which they use their summer teachers, as well as in the salaries they pay them.¹ To contrast extremes again, one institution asks its summer instructors for full programs in eleven out of twelve cases, another has one-third doing full work, nearly two-fifths having but one class each, and two-thirds having either one or two classes only. The secret of this is, of course, that the teachers in the latter school are largely those who have enrolled for courses of their own, hoping in many cases ultimately to secure degrees.² Of the two schools quoted above, one pays none of its instructors less than four dollars and pays only two of them less than five dollars per weekly hour; whereas the other pays over one-half of its extra teachers less than three dollars, and only about one-fifth receive five dollars or more.

CONTRASTING POLICIES OF SUMMER SESSION ADMINISTRATION

The facts presented above disclose two well-defined policies of summer school administration, expressed with consistent contrast in the two schools to which allusion has been made. The school at Maryville provided its increased summer attendance with experienced teachers of mature age, trained in good institutions and employed at respectable figures, to give their full time instructing in fields in which they were regularly engaged. This provision was made, too, not only for college students but for pupils of secondary grade. Assuming that as good judgment was used in selection as was shown in fixing conditions of employment, the students at Maryville in the summer of 1916 had unquestionably superior advantages; it is apparent that the school authorities had nothing in view except the excellence of the instruction that could be furnished. At Kirksville, on the other hand, such teachers were engaged as would themselves register for advanced courses. Of the twenty-seven, eighteen worked on part time and as many (fifteen men and three women) were enrolled in courses. Fewer than half had had four years of higher schooling from any source. As they were

¹ See page 427.

² Those of whom this is true are noted in the table, page 427.

mostly part-time instructors, their number was abnormally large, thus swelling the "faculty" list, while their presence as students helped to fill out the upper classes that would eventually take degrees, thus heavily emphasizing the senior college idea. Altho themselves but juniors or seniors, the undergraduate members of this group of teachers turned in one hundred thirty-six freshmen or sophomore grades in such subjects as "Teaching of English," "Electricity," "Food Preparation," and so forth. At Maryville, while two-fifths had attended a normal school, and a third of the group had attended Maryville, none had had normal school training only; at Kirksville well over half had had only normal training, and had received it all at Kirksville, while over two-thirds had attended there. At Maryville the professional experience (median years, ten), like the age (median years, thirty-seven), is high, and the salaries paid are sufficient to ensure a relatively good personnel; at Kirksville a median of four years' experience, including, of course, all kinds of teaching, means that the experience in higher instruction is in most cases nil, while the salaries are cut down because the opportunity can be made attractive by giving credit toward a degree.

On the whole, the situation at Maryville impresses one as a sincere attempt to solve the educational problem for its students in their interests; the administration at Kirksville, on the other hand, leaves the impression of constant and skilful manipulation not in the real interests of the students, but to build up on a limited budget the kind of institution that this particular school long since set out at all costs to become. Strategy for this purpose finds unusual scope in the summer session. It is flattering for a young teacher or superintendent within measurable distance of his degree to be asked to give instruction where he has just been or still is a student. It is attractive even to the normal school graduate who now ranks as an alumnus to be recalled thus early to his alma mater. By giving each a class or two only, these favors can be multiplied, and by passing them out with discernment, one can reward faithful supporters, win the interest of those who are wavering, or even invade hostile territory. Some superintendents, when so attached, bring with them to the school a whole train of their admiring teachers and students. Thus the plan increases the attendance, relieves the regular teachers, reënforces the upper classes and the degree list, popularizes the school, cuts down the expense, and keeps the influential teachers of the region at the school and away from the university or other higher institutions where they ought now to be—all obviously good business, tho again unfortunately not education.

Whatever may be true of a college, the summer session of a professional school, altho subordinate to such a school's main function, is a responsibility that can neither be exploited nor neglected. It is a general observation of all professional schools, thoroughly substantiated by theory, that practitioners of some experience, coming for study at intervals in their practice, work with greater insight and profit than do complete novices. The latter are working up their initial speed, as it were, while the former are simply increasing their momentum. Among teachers the economic situation makes

it necessary to provide the best possible opportunities for study during the summer. It is not primarily for the sake of the teachers, but for the schools in which they will teach, that the summer school facilities should be as fine in quality and as well organized as it is possible to make them. Haphazard experiments can no more be risked during the summer than at any other time in the year. The natural difficulty of giving each of the many new applicants what he needs is great enough without in addition sacrificing the quality.

It should be borne in mind, furthermore, that the attendance at the summer session has been greatly stimulated by the pressure brought to bear upon seekers of certificates to get their "approved grades" at the normal schools instead of by examination, and that on the strength of these enormous summer enrolments in the secondary and junior collegiate fields the normal schools have been steadily demanding increased aid from the state. To a candid observer it may fairly seem like a misappropriation of such funds when by an administrative trick the instruction of those in whose interest the aid is granted, is cheapened, and the funds are diverted to a purpose which, however gratifying to the administration, is certainly much less important to the state. If senior college instruction is given, it must certainly be given by amply trained and otherwise qualified teachers. If, however, such advanced instruction can be provided only at the cost of reducing the quality of the instruction given to the lower classes below the level of that in a first class city high school, then a sincere institution will have nothing to do with it.

B. THE STUDENT BODY: SIGNIFICANT FEATURES IN SELECTION, ORGANIZATION, AND ADMINISTRATIVE TREATMENT

1. *Men as Normal School Students*

Shortly after the establishment of the Missouri normal schools, three-fifths of the students were men; at present, two-thirds are women. Among the students in the regular session the men doing secondary work number thirty-eight per cent or nearly two-fifths, while of the collegiate attendance a little over one-fourth are men. In the summer session the proportion of collegiate men drops to one-fifth.¹

MOTIVES IN MALE ATTENDANCE

Light is thrown on the character of this male attendance by a consideration of the motive by which it is actuated. Four-fifths of the men attending the schools,² when they were visited, reported their intentions as to teaching, and of these seventy-eight per cent stated that they had no intention of teaching permanently, altho seventy-five per cent said they expected to do some teaching. Of the women one-half stated that they did not intend to teach permanently. This fact should occasion no surprise, inas-

¹ This is for the summer-only group; of the entire summer attendance the collegiate men constituted 22.8 per cent.

² Information secured at Kirksville, Warrensburg, and Maryville only. See page 434.

much as the tenure of women teachers is traditionally terminated by marriage, which is normally expected by the majority both of men and women. For this reason possibly the proportion is about the same among collegiate and secondary women. But that nearly eighty per cent of all the men students replying, and a still larger proportion of the secondary group, should admit that, altho attending a school supported by the state for the purpose of training teachers, they expected to make teaching but a temporary stage on the way to a permanent occupation, is certainly a situation of great significance.

REACTION OF MALE ATTENDANCE ON THE INSTITUTION

It cannot be said, of course, that it is any worse to prepare men than it is to prepare women for temporary positions as teachers; the chances are that the men will have as long a tenure as do a large number of the women. The importance of the fact lies not in the brief tenure of the men trained, but in the reaction that their presence entails upon the institution itself. Women may be prepared as specifically as possible for their work, precisely because it is their principal vocational outlook; in general, except in large urban centres, educated women either teach or marry, and even in the latter case their training for teaching is still of value, tho perhaps not so valuable as some other form of training might have been. A man, however, who has definitely pledged himself to medicine, law, or business, and thinks of teaching solely as a potboiler, or one who is merely convinced of his discontent with teaching and is open to conviction as to what is better worth doing—either of these is attracted by the normal school as the cheapest form of credit-granting institution, with the advantage of its sponsorship for the needed teaching position thrown in. To this class of student a prescribed curriculum, enforced prerequisites, and above all required courses dealing thoroughly with teaching are objectionable; while the “proving up” system, where each is credited liberally “on his merits” without too much examination, the plan of free election, and a minimum of required “pedagogy” are just the thing. Work that will not count as credit in college or university must be avoided, and all courses must be as “academic” as possible. These well-known preferences of men students tally fairly well with the policies of the Missouri normal schools, and one has only to visit the schools, read their literature, and talk with their officers, to realize that a cardinal principle of their operation has been to retain men at all hazards.

Ostensibly the reason for the efforts to attract men to the institutions is to “retain men in the profession,” a laudable purpose, but one that receives an unexpected twist in its working out. It is the elementary schools primarily that have lost men teachers; high schools in Missouri employ men in over one-third of their teaching positions, and the principals and superintendents are very generally men. When, therefore, the normal schools appeal for facilities whereby they may “retain men in the profession,” what they really mean to say is that they should be enabled to prepare men for high school

and administrative positions—two aims that are, of course, quite unlike that which governs the bulk of their effort, and require different curricula and equipment. This latent purpose is shown clearly in the type of school chosen by those who “intend to teach immediately on leaving this school,” as the question ran.¹ Thirty-four per cent even of those men who have not yet finished their own high school studies have their eye on high school or administrative positions, while over four-fifths of the men in the normal school proper expect such work, tho it be only as a temporary employment. The actual records of the graduates show the same result.

It is the unavoidable conclusion from all the evidence that a desire on the part of the normal schools to retain their men has been not only a leading factor in developing such methods and policies as should make it easy for men to enter and profitable for them to remain, but also that it has been primarily responsible for the change of emphasis from the elementary to the high school teacher. The latter required normally four years of college work, an expansion that would afford ample opportunity, on a free elective basis, for enough academic work to hold the average man who had once enrolled.² At the same time, the accepted preparation of a high school teacher was everywhere loose enough professionally to enable a man to ignore the teaching courses to a very considerable extent. The outcome of this development was the “college” idea, pure and simple, for advanced students. With this once established for the sake of the men, women naturally availed themselves of it, aided therein by the encouragement of the school authorities, until to-day, of the group of collegiate normal school women, forty-five per cent avow themselves as prospective high school teachers, together with eighteen per cent of the women still doing secondary work.³

This policy may have had some effect. Kirksville, the school that has followed the plan most vigorously, has kept a proportion of collegiate men as high as thirty-two per cent;⁴ and Cape Girardeau, a school that has also laid great stress on it, even offering curricula wholly free from professional flavor, has retained still more, having thirty-three per cent. Warrensburg, Springfield, and Maryville, on the other hand, schools that until recently concerned themselves very specifically with the elementary

¹ See page 434.

² A question put to the students at all schools furnishes unexpected light at this point. “What have you found to be the most valuable feature of this school for your purpose?” was a question taken advantage of by many students to express preference for various departments. Forty per cent of the college men declared for the “academic work” as compared with thirteen per cent of the college women. Of the latter, fully one-half voted for “professional work” as the most valuable feature.

³ A memorandum from the sixty-hour (i.e. two-year) class of 1915 at Kirksville, prepared by the class, contains a statement as to “Character of positions sought for next year,” as follows: “Superintendencies, 6; principalships, 4; history teachers, 7; English teachers, 7; mathematics teachers, 6; music teachers, 6; Latin teachers, 2; science teachers, 2; agriculture teachers, 2; manual arts teachers, 2; domestic science teachers, 2; physical education teachers, 1; commerce teachers, 1; bookkeeping teachers, 1; elementary school teacher, 1; primary teachers, 1; primary supervisor, 1; undecided, 8.” The elementary school comes poorly off with two in a group all of whom have barely sufficient training to meet standard requirements for elementary school work.

⁴ The outcome of this emphasis at Kirksville is even more noticeable in the product of the school. While preparing one-fifth of the rural teachers trained at normal schools, and less than one-sixth of the teachers in graded elementary schools so trained, Kirksville is credited with twenty-seven per cent of the first class high school group (see page 439) and over forty per cent of the superintendents in first class systems who attended normal schools (see page 378). The latter were all men.

problem even tho many of their graduates became high school teachers, show a proportion of collegiate men students of twenty-five, twenty-six, and twenty-two per cent respectively. All things considered, it seems quite probable that if prescribed curricula prepared solely for the purpose of training efficient teachers for various fields of service, secondary included, and definitely committing a candidate to that service, should be introduced in the Missouri normal schools, the numbers of men in attendance would be very greatly reduced by the disappearance of those who were using the schools merely for personal advancement. This has been the case in other schools that have had the courage to prefer a high standard of professional training to the weak popularity of a nondescript college. The *bona fide* male candidates that remained could then be given, in selected schools, differentiated curricula suitable for their work in high school instruction or in school administration.

2. Problem of the Secondary Student

A second problem in the selection of students confronts the normal school in the question of its attitude toward students of secondary grade. This is a question that depends partly on the normal school's conception of its function as an educational institution, and partly on the general policy of the state as expressed in its legislation relating to teachers' certificates and its appropriations for purposes of training. From the institutional point of view the problem is difficult because of its radical nature. For thirty years the normal schools were almost wholly secondary institutions in so far as any current generic term can be applied to them. Since 1900 they have grown steadily and firmly into professional institutions of collegiate character. The question now is what to do with the remnants of past practice. Familiar association and administrative habit cling to the past, while freedom and progress require adjustment to the present and future. A complete abandonment of secondary work in normal schools will come in time; should it be brought about at once?

CHARACTERISTICS OF THE EXTREME AGE GROUPS

There are in all the schools over two thousand secondary students in the regular sessions, and seventeen hundred more in the summer. Twenty-five hundred are women, and over a thousand are men. What are their distinguishing traits? Inasmuch as a wide range of age is the essential feature of the problem that they present, it is best for the sake of clearness to ignore the intermediate ages of nineteen and twenty, which represent a natural transition between the extremes, and to compare the younger group directly with the older.¹ About fifteen hundred are twenty-one years of age or more—enough by themselves to fill two large high schools. They number one-third

¹Distinction in nationality is scarcely perceptible. The question of town or country breeding is also negligible; the older group has eight per cent more men from the country. Parental income exhibits the expected tendency: from nearly seven hundred answers, it is clear that the older and more retarded students are from less well-to-do homes.

of the secondary students in the regular session and over half of the "summer-only" attendance. Four-fifths of them attend in the spring or summer quarters when their schools are closed. On the other hand, nearly half of the secondary students attending the regular session are but eighteen years old or less, while in the summer group fewer than one-quarter are so young. The proportion of boys under nineteen is over one-third in the fall, winter, and spring, but falls to one-sixth in the summer. It is evident from this that the secondary students of the regular session are predominantly of secondary school age, while the over-age students of secondary grade attend the normal schools chiefly in their interims of teaching.

GEOGRAPHICAL DISTRIBUTION

The first unmistakable evidence of divergence between these older and younger students appears in the relative distance from which they come to school. Only one-fifth of the older group is local to the county, while nearly half of the younger group comes from the same county; three-fifths of the older students come from beyond the adjacent counties, while but one-third of the young students are so derived. At Springfield only nine per cent of the over-age men are local, while at Kirksville over one-third are so; but the younger group is more restricted locally than the older in each of the five schools, altho to a less degree in the summer than during the regular session. This independence with regard to locality on the part of the older secondary students is of importance in arriving at a solution of their needs; it is evident, as one would expect, that they constitute a self-determined group, are less influenced than younger students by local suggestion, and would probably go anywhere in the state for their training almost as readily as they seek the normal school in their own district.

PREVIOUS SCHOOLING

More of the older secondary men students than of the younger have attended rural schools, but the women show almost no difference. The record of high school attendance is hardly what one would expect. In the total attendance at the regular session of 1913-14, forty-seven per cent of the younger students as compared with twenty-six per cent of the older had never attended high school elsewhere (women, fifty-four per cent to twenty-two per cent). But among students attending only in the summer the condition is reversed, and fifty-nine per cent of the over-age students as compared with nineteen per cent of the younger students had never been at high school elsewhere. In general these figures cast some doubt upon the supposedly essential service of the normal school to the older student who was presumed to be without other school privileges, and indicate that it has been recruiting heavily among such boys and girls as should properly be in high school.

OPPORTUNITIES FOR HIGH SCHOOL ATTENDANCE

In order to determine further the relation of the normal school student to the high school situation, the students at each normal school when it was visited were asked whether there had been a three or four year high school within convenient reach of their homes. According to their replies the age group under nineteen, which formed forty-five per cent of all the secondary students, had four-year high schools accessible in over half of the cases; about three-fifths, if three-year high schools be included. In the decade after 1906 the number of classified high schools in Missouri increased from two hundred thirty-one to five hundred thirty-five—considerably more than double; and the number of first class high schools had increased over two hundred seventy-five per cent, rising from sixty-three to two hundred thirty-six.¹ In 1918 but eleven of the one hundred fourteen counties in the state lacked a standard four-year high school, and four of these had standard three-year high schools; two only were without a recognized two-year high school. In eighty-four of these counties, in one hundred two schools, the state had established training centres for rural school teachers; such opportunities are therefore well distributed.

TEACHING EXPERIENCE

Experience data should, of course, show that more of the older than of the younger students have taught. They show this; but they show also that an astonishingly large number (thirty-eight per cent) of the older secondary men have thus far had no connection with a school as teachers. Altho at Springfield only one-sixth of the older men have had no teaching experience, at Kirksville the proportion is three-fifths. What have these mature individuals been doing? Are they belated farmers' boys using the normal schools now to get a general education? Remembering that ninety per cent of all the secondary men at Kirksville declared that they had no intention of teaching permanently, this seems to be a reasonable conclusion.

QUALITY OF THE OLDER SECONDARY STUDENT

A further item possibly throws some light on the quality of the over-age student. Large claims have been based upon the maturity of the students who frequent the normal school, particularly as a justification for shortening the secondary course, "doing three terms' work in two," and so forth. Cases occur of active, self-educated students completing in a few months the formal requirements that usually consume years, and the inference is that maturity is of itself the enabling factor. If true, this ought apparently to show in the number of programs with excess hours permitted to older secondary students because of superior ability. With important exceptions, this advantage, where it exists, is surprisingly small. Analysis of the secondary programs in the regular session of 1913-14 shows that fourteen per cent of the term

¹ *State Report*, 1916, page 68.

programs taken by the younger group consisted of twenty-five weekly periods or more, while but fifteen per cent of the programs taken by the older students were as heavy. Among the men alone the younger students have actually a slight advantage. At Kirksville, Warrensburg, and Maryville the proportion permitted to take excess hours is so small—two or three per cent—that the figures signify little. At Cape Girardeau, however, where the restrictions that hedge excessive student programs at the other schools had not been applied, fifty-nine per cent of the over-age men take twenty-five hours or more, as compared with sixty-seven per cent among the men under nineteen. Among the women the balance is reversed, but the difference is small. At Springfield eleven per cent of the older take twenty-five hours or more as against nine per cent of the younger. In the summer session, however, a number of capable, ambitious, and experienced teachers appear and take all the credit available; hence the older students outdo the younger by several points on programs of twenty-five hours or more—Cape Girardeau: twenty-five to fourteen per cent; Springfield: twelve to four per cent. These facts, if typical, may warrant the conclusion that the older secondary students in the regular session are on the whole a duller group, possibly somewhat parasitic on the school in their efforts to get a better job, and probably worthy of less attention than has heretofore been given them. Studies of student performance at both Columbia and Harvard Universities would make this inference appear reasonable.¹ The summer session, on the contrary, deals with a mature but selected group of workers stimulated by a sharper vocational motive.

TREATMENT OF THE YOUNG SECONDARY STUDENT

The wide differences in age among secondary students seem to offer ample justification for distinguishing treatment. Regarding the younger group, there can be no difference of reasonable opinion: students of this early age should at once be returned to the high schools nearest their homes, and be required to finish the course there before coming to the normal school.² A high school senior twenty years of age is not hopelessly out of place, tho he be two years behind the schedule. Taking the secondary enrolment of 1913-14 as a basis, and including half of those who are nineteen or twenty, we would have about forty-five per cent or, roughly, seventeen hundred students to be returned to high schools—an increase of only five per cent in the total attendance at first class high schools in that year. Slightly over two thousand students would remain to be otherwise provided for.

The course here suggested is advisable first of all for the sake of its effect upon the normal school in eliminating an element of immaturity that under modern conditions

¹ Recent information gathered by the Director of Admissions at Columbia shows clearly that the younger students do the better work, the grade diminishing steadily and consistently with increased age. The same results appeared at Harvard with the additional discovery of decreased liability to college censure among young students.

² In the case of students living at a distance from high schools, it is recognized that such a measure could not fairly be undertaken without statutory provision for free tuition, to be paid by the county, in the high school most accessible. This step, however, is long overdue in Missouri from every educational and democratic point of view.

has no place there, and that at present seriously diverts the energy and attention of both teachers and students from the one professional aim of the institution. The most obvious way to emphasize the collegiate and professional character of the institution is to turn over all secondary work to its own natural agents, the high schools, or if necessary to a third agency, as indicated below. In the second place it is cheaper to educate students of this grade in the schools that are intended for them. It is both absolutely cheaper in money, and it would be a relief to the state, since the expense of such secondary instruction would be borne locally either by the county or by the district. Local institutions are already fully organized, but are usually small, and these students could be distributed among them with relatively slight increase in cost while the saving at the normal schools would be considerable.

A further consideration is fundamental. The secondary schools of Missouri have an educational right to the support and recognition that such a policy would supply. In going over the state, the enquiry staff found numerous cases of complaint on the part of high school officers that the normal schools repeatedly drew off their students, either altogether or shortly before graduation, by enabling them to take a heavier program or to combine college and high school work and thus eventually to save time. This telescoping procedure has been a normal school practice of long standing, and is part of the tendency to over-speeding that has been the chief cause for friction with the state department and other crediting agencies. It is but justice to the secondary school in its effort to provide a deliberate and thorough education, to require the sanction of its graduation before admitting one of its students, and the weaker the school, the greater the reason for sustaining its claims if its work is to be recognized at all. Each high school can easily provide examinations whereby capable students may hasten their work; it should not be made a victim of a process that demoralizes its senior class in the interests of another institution.

It may be objected that for some students the physical difficulty of attending distant high schools is too serious to be considered. This is certainly a habit of thought rather than a matter of fact. Many high schools both in Missouri and in other states have considerable colonies of students drawn in for the week from the neighboring country. The high school at Ava, in Douglas County, Missouri, is an excellent example of an isolated but thoroughly modern school serving the whole surrounding region in this manner. With its teacher-training class it constitutes a miniature normal school for the district, and renders a service that could be duplicated at will in any similar locality. So long as secondary students are allowed to teach at all, they should be prepared at these distributed training centres, where good student material is available from which a selection can be made, thus in turn strengthening the high school itself for its local purpose.¹

¹ The problem of housing and supervising young students in a high school town need be no more difficult than at the present normal schools. Only one of the latter has even partial dormitory arrangements, the students everywhere occupying rooms secured in the several neighborhoods. Segregation of boys and girls and approval of rooming houses

SPECIAL NEEDS OF THE OLDER SECONDARY STUDENT

On the other hand, would-be students who have reached the age of nineteen without attending a secondary school, or who may have attended for a year or two and then have taught for a series of years, constitute a different problem altogether. For such people the ordinary high school does not make suitable provision: its student body is too youthful for comfortable association, and its processes, if not unnecessarily slow, are unsuited to the older group; furthermore the presence of much older and more experienced minds of low attainment reacts harmfully upon younger students. For such belated, tho often capable and worthy individuals, the middle western normal school has, from its beginning, been a haven of refuge. The completeness with which large numbers of these candidates have disappeared and been assimilated within its frequently enormous bulk is the clearest testimony to its formlessness. Instead of preparing selected material in the best possible way for a fixed purpose, it has been intent upon giving each individual, for his own sake, a vocational opportunity to fill any teaching niche that might offer, regardless of whether he took one term or a dozen to prepare for it; and it has utilized for this purpose, usually in good faith, the various time-saving devices elsewhere described. Under rural and pioneer conditions this was a necessary and welcome service, but as social requirements have become definite and specialized, the emphasis in professional matters has inevitably changed from the mere welfare of the individual to the quality of the service that he is prepared to render the community; he is selected, trained, tested, and inspected, not to ensure him a successful career as a breadwinner, but to guarantee his proper performance for the sake of others, and professional institutions should be most insistent in upholding this view. In so far as the selection of material has been concerned, conditions have been improving rapidly in Missouri, particularly since 1914; collegiate students are much more carefully separated than formerly from those who lack complete entrance qualifications. It remains to provide in some adequate manner for the large number of mature students, usually already teachers of some experience, who have not satisfied these requirements.

A STATE HIGH SCHOOL

An essential feature of a provision for this purpose should be its distinctness of organization; a school for such people should stand as separate and apart from the normal schools as from the regular high schools; it should have a completely separate staff, separate buildings, and, if possible, a separate location; it should be in session the year round; it should be as free to adapt itself to its peculiar function as is any other state institution, and should aim to provide for mature secondary students preparing not only for normal schools but for the university, as well as supplying high school opportunities for any adult students who may not wish to continue their edu-

is usually required by the schools, but at Springfield, a city of forty thousand population, not even this is demanded. A good high school administration could easily develop a system of control at least equally satisfactory.

cation beyond that point. Such institutions would be nothing other than state high schools taking their warrant from the analogy of the state university. These could be easily organized, for the present, in connection with certain of the normal schools, by effecting a rigid separation, as regards staff, program, and attendance, between the students in the normal school proper and all secondary students over twenty years of age, no younger applicants being admitted unless clearly unsuited to high school membership. It is probable that the demand for such institutions would diminish¹ considerably as higher requirements for teachers' certificates were made universal by law throughout the state. They might then be reduced in number, possibly to one, having a central location and accessible from all directions. A plan of this kind would furnish a practicable and congenial arrangement whereby older and retarded students could recover their handicap to the best advantage, and whereby really valuable and ambitious minds could be saved to the state without prejudice to a sound organization of the normal schools.

3. *Organization of Attendance*²

THE PROBLEM OF NORMAL SCHOOL ATTENDANCE

The historical circumstances out of which the present problem of attendance at the Missouri normal schools has arisen have already been described.³ It will be remembered that the schools were started at a time when formal training for teaching was all but completely lacking in the state, and that they were kept alive, often by desperate effort, for a public largely apathetic or openly hostile. Their leaders were quasi-missionaries. Their aims were two-fold: they sought, on the one hand, to attract and interest boys and girls in education, and on the other, to justify their own existence before a critical legislature that could be impressed chiefly by size. They were independent, autonomous organizations actuated by a generous rivalry. Given

¹ The actual as well as relative number of secondary students at the schools is apparently diminishing with great rapidity. Springfield reports (*Catalogue*, 1917-18) 864 secondary students out of 1797 or 48 per cent as compared with 1207 or 63 per cent in 1913-14. Kirksville gives her proportions in 1916-17 as 20 per cent, which would be about 337 (*Catalogue*, 1917, page 18) as compared with 805 or 54 per cent in 1913-14, but it is not clear how this figure was reached. When the records of this school were studied, it was found to be impossible to ascertain the real classification of large numbers of students. To the question as to how the report required by the state superintendent was compiled, the reply was given that the numbers were "estimated by the membership in various representative classes or in other ways." It is noteworthy that these reports from Kirksville are uniformly in round numbers. When it is recalled that this school has frequently made up its secondary units in connection with attendance on "college" classes, it will be seen that the chance for error in this method of reckoning is high. The figures used in this study were arrived at by an examination of each student's program—an obviously unsatisfactory method, but the only one available in the absence of a definite classification based upon the amount and character of secondary work completed.

² *Development of the Calendar*. From the establishment of the First District Normal School at Kirksville, in 1871, until 1904, all of the schools observed a thirty-eight or forty-week, two-semester calendar, with each semester subdivided into two terms. Meanwhile the summer session appeared. Started at Warrensburg in 1894 as a private undertaking of the faculty, it was formally taken over by the regents in 1900. Summer sessions were inaugurated at Kirksville in 1896 and at Cape Girardeau in 1897. Springfield and Maryville opened their careers with summer sessions in 1906. These special sessions of the school, at first but six weeks in length, quickly became popular as an effective substitute for the earlier form of teachers' "institute"—an improvised three or four week normal centre conducted for the training of teachers in service. The superiority of the summer session for that purpose finally became so apparent that in 1904 the calendar was altered from a semester to a term basis, and the summer session was included as the fourth twelve-week term of the regular school year. It has gradually shrunk to a ten-week term, at first with compensating work on Saturdays and later without this equivalent. Credit is, however, maintained at the full amount.

³ See pages 36-41.

such premises, a certain type of organization follows almost of necessity. Every applicant must be admitted at any time without inconvenience or disadvantage to himself; it must be possible, in turn, for a student to drop out at any point, likewise without disadvantage to himself, except for the actual loss of time while absent. Such a policy is clearly most gratifying to the student, and to his parents and his friends in the community;¹ it gains support for the schools, and is the policy best calculated to increase attendance.

EDUCATIONAL EFFECTS OF THE PRESENT SYSTEM

Educationally this policy has certain very definite implications. It makes a curriculum organized for a purpose and followed in sequence impossible; or at least it places a very high premium upon an indiscriminate or loosely grouped elective system for the sake of ease in administration. The larger the number of short, interchangeable units, the more easily can programs be made up and irregular students accommodated. The consequent results are bad. Ten new students report for the second term of a history, literature, or science sequence. If fairly treated, and certainly if they constitute a majority of the class, they must have the general aims and setting of the course repeated; instructions about study, reading, or gathering material must be gone over a second time, and the new students must be broken into possibly new habits of work while the others mark time. Worst of all, the earlier course is of no assistance to the later course in the minds of the newcomers, and if these are to progress without it, those who have taken the earlier work must lose what is rightfully theirs. The teacher must forego allusion to earlier comment, situation, or example. To handle the year's work as a whole is like discussing a play with an audience half of which has missed the first two acts. All thought of the larger development and coherence of the material is therefore dropped, and the work of the course resolves itself solely into what can be seen within the limits of that particular ten or twelve week term, as tho teacher and student had never met before. The class is always starting again and never accumulates the real momentum which is the chief result of prolonged coöperation by teacher and class.

Aside from this impoverishing effect on instruction, the system is wasteful. Classes are repeated from term to term for small groups that in an organized curriculum would have but one place for that subject, and that in a sequence in which it interpreted its predecessor and prepared the way for work to come. Further, such a variety of subjects being available, it is easy for students to form the habit of dropping one subject for another thru sheer caprice—convenience of program, presence of friends, popular teachers, and so forth—even tho they do not leave the school. On the other hand, it not infrequently happens that when the two or three parts of a subject are given during the same term by this system, a student will enroll in both or all.

¹ "We have students entering at almost all seasons, and we undertake to adapt ourselves to the necessities of the communities which we serve." *Kirksville Catalogue*, 1903, page 26.

A student commencing English history may be introduced by three separate beginnings at one time. Indirectly the procedure cheapens the whole institution. It virtually begs the student to "drop in at any time," and such an opportunity does not command respect. Any student appreciates more keenly the organization that requires an adjustment on his part, even to the point of some sacrifice, if it is plainly to his larger interest. A person who attends a college or university willingly adapts himself to the prerequisites and sequences that are demanded, even in a general course, and traditionally takes the full curriculum or at least an unbroken year; his experiences represent a coherent development. The graduate of this type of normal school, on the contrary, thinks of his work not in large, significant wholes, but in unrelated fragments heaped up at last to the proper height. Such normal schools can hardly object to being advertised by their one-term students when their curricula are but a medley of one-term courses to be picked up, dropped, or intermingled at will.¹

There is but one favorable thing that may be said of this organization for the transient student. It supplies a hand-to-mouth education for the student who must lead a hand-to-mouth existence. Under pioneer conditions such students are many, and are too precious to ignore. But the time comes when the demand for teachers with thorough preparation outweighs every other concern, and then these erstwhile beneficiaries should be provided for otherwise, while the normal school moves ahead on its proper path.

The Missouri normal schools are acute sufferers from the system described above. About half of the teachers conducting sequences of two or more terms² (seventy-seven) still report appreciable changes in the membership of classes at the end of each term.³ They very generally condemn this practice, tho a few have evidently become so used to it as to see no disadvantage, and two actually commend it. Typical criticisms are: "Class held back," "Prevents consecutive work," "Harder for student," "Much ground retraced," "Student fails, or succeeds at expense of teacher," "Confusion, waste, duplication of work," "Destroys interest, lowers standards," "Perfect pandemonium," "New students a drag; no continuity." One teacher considers it a bore to have "absolute constant membership"! At some schools a considerable change occurs even in the middle of the term; especially in the spring when teachers come in after the close of their schools. Cape Girardeau teachers note this in eleven cases, and a class in Ancient History was visited there to which had just been added eight students wholly ignorant of the first six weeks' work.⁴ At Warrensburg and

¹ The normal school catalogues contain so many warnings against the imposition of the pseudo-normal student (that is, one of brief attendance) that the danger of misrepresentation must have been considerable. With a curriculum nothing but a rope of sand, however, it is hard to see how this can well be avoided. The school's only protection is an organized and continuous course before a license to teach can be had.

² The reason more sequences are not reported is the best of evidence of the conditions described. At Maryville, for example, these prevail to such an extent that true sequences in courses from term to term are no longer attempted.

³ "Elementary Education, twenty-six entered, ten withdrew." "Algebra I, II and III, less than 5 per cent continued thru; 50-75 per cent new each term." "Rhetoric and American Literature drops 27 per cent end of first term and adds 18 per cent; English Literature drops 35 per cent and adds 31 per cent." These are typical reports.

⁴ These were applicants for "approved grades." They were admitted to a beginning class six weeks ahead of them, and at the same time and in the same subject to an advanced class six weeks ahead of them. At the end of the quarter

Maryville this apparently does not happen. At all of the schools individual students appear to be admitted to classes at almost any time. "Students enter anywhere from first day to first eight weeks," says one primary English teacher, and she proceeds to state how she fills up the time until the class is collected.

CHANGES IN STUDENT BODY FROM TERM TO TERM

About one-eighth of the students leave after the fall quarter and are replaced by a new sixth. After the winter term more than one-fourth leave and two-fifths enter or reenter. From spring to summer one-half remain, while one hundred thirty per cent more come in. This shift is much more pronounced among the secondary students than among the collegiate students, especially after the winter term. The latter have already developed considerable stability of attendance. Omitting the "spring only" and "spring and summer" collegiate students, inasmuch as they are chiefly teachers who come in after their short-term schools have closed, there remain one thousand two hundred sixty-nine collegiate attendants at the regular fall, winter, and spring sessions, and of these three-fourths are found staying thru either three or all four quarters. These figures are for the total enrolment of 1913-14. Approximately the same result appears in a study of the attendance at four schools¹ when visited in 1915. A group was made up which comprised all those who had attended three terms or more in the collegiate department. These numbered four hundred seventy-three, and seven-tenths of them had made at least three terms of their collegiate work consecutive.² This is most encouraging in view of the proposal for a fixed and regular session. Add to these such students as could accommodate their plans if the school were to require it, and we would have an impressive showing.

SEQUENCE OF YEARS

The question of sequence of attendance from year to year is another important but, for the present, less critical problem. It is possible for students to omit a year's attendance, while they recoup their finances, without seriously disturbing the work of the institution. Experience in itself is doubtless a benefit, tho when this is lacking in wise direction, its value falls comparatively low. The chief objection lies in the educational malpractice whereby these partly schooled students are turned out on small, remote, and therefore helpless communities. As soon as fitting legislation makes

they entered the regular beginning class for the first six weeks' work and the regular advanced class for the six weeks omitted there. At the end of this second six weeks they received credit for two full quarters of ancient history. Surely "adjustment to the needs of the individual" could go no further. The practice was admitted to be very bad, but it "could not be helped" — except, of course, by not doing it. This is an excellent illustration of the tendency to cheapen the instruction provided for secondary pupils whose numbers ensure the appropriations, in order to build up expensive advanced classes for a few students. Had one of these eight applied for advanced Latin, an instructor would at once have been assigned even for his sole benefit.

¹ Data not secured from Warrensburg.

² The secondary students for whom the same facts could be obtained numbered 346. Of these 43 per cent had not had three consecutive terms in their normal school attendance thus far, tho all had had at least three terms at the school. The relief to the school by the elimination of these term-at-a-time secondary students would be considerable.

this impossible, the problem will disappear. Students expecting to teach will be obliged to provide for their training otherwise than by imposing upon undiscerning school boards. In the group of collegiate students last referred to in the preceding paragraph were one hundred fifty-five who had taken six terms or more of collegiate work. Of these, eleven per cent had done their work in two separated periods of three consecutive terms each, sixteen per cent had taken one such period and the remainder of their work in scattered terms, only one per cent took no three terms together, while seventy-two per cent had taken all six terms consecutively. Here again is convincing evidence that the collegiate department at least is ripe for a coherent organization.

NEED OF CENTRAL ADMINISTRATION AND FAVORABLE LEGISLATION

The participants in the enquiry are strongly of the opinion that the regulations governing attendance at the normal schools of Missouri should be revised. The question is closely interwoven with that of the curricula, and on the treatment of these two vital factors will hang the verdict as to whether the normal schools are to be leaders in the moulding of teachers or mere followers in the path of least resistance marked out by popular fancy.

It will be very much more difficult for the normal schools to do the things that should be done if they continue to stand apart than it will be if they centralize their administration, and are thus enabled to share responsibility. As separate schools they are dependent on their local constituencies; as representative arms of a centralized state function, however, they can enforce policies that are right from the higher point of view of the state, unaffected by local prejudice. Favorable legislation likewise would be of immense assistance. The third grade certificate should be abolished; this would place all preparation for teaching in Missouri on at least a high school basis, and those who go no further should of course be required to attend the training classes.¹

This, too, would enable the normal schools more readily to dispense with their secondary departments, as elsewhere suggested. Furthermore, if all cities having a population of five thousand or more were required to employ only such elementary teachers as had at least two years of professional training in advance of the high school, the task of the normal schools would at once become definite and authoritative. It is difficult for schools to maintain standard requirements when any student may leave at any point in the course because of an offer to teach that cuts under his training.

Such legislative coöperation would aid the normal schools greatly in discharging the task that the state has put into their hands. Broken attendance is much more characteristic of the secondary than of the collegiate group, and if the former department were eliminated and a clear goal set for at least part of the collegiate courses, a sound development would be assured.

¹ So far from this step, the Missouri Legislature of 1917 took the unaccountable action of making the third grade certificate renewable once without examination. It could previously be acquired four times by successive annual examinations; with four examinations and the four renewals, therefore, the present arrangement gives virtually an eight-year teaching permit to persons who are wholly unfit.

OPPORTUNITY OF THE SCHOOLS FOR INDEPENDENT ACTION

Nevertheless, even without such help, the schools have it in their power to bring about radical changes for the better solely thru their own initiative. Definite, three-term curricula for the most needed objectives should be laid out in common by all the schools and adhered to, no student being admitted at any point who has not fully satisfied the preceding requirements. There is undoubtedly a large body of students ready to take an exclusive curriculum of this sort, and it may be safely predicted that most of those who now enter and withdraw irregularly would accommodate themselves to such a requirement if it were necessary. As long as the school continues to sacrifice its coherence to the putative "necessities" of the students, one may be sure that the latter will take full advantage of their opportunities. Even the students themselves, however, prefer the other system and think it feasible. When asked as to the merits of saving funds for a year's continuous attendance *versus* the quarterly interchange of teaching and study, ninety-four per cent of the students declared that the first was wiser. And when asked whether that plan was practicable for most student-teachers, nearly three-fourths voted that it was.¹ The normal school teachers were not nearly so confident on this latter point as were the students. Two-thirds of those teachers replying from Warrensburg and all but one from Maryville believed that consecutive attendance on the part of the great majority of the students was practicable, but at Cape Girardeau one-half, at Springfield two-thirds, and at Kirksville three-quarters of them were of the opposite opinion.² The discount in these expressions, both of students and of teachers, must probably be made from the objectors as most likely to be influenced by the situation with which they are familiar. It is certainly difficult to see why a student, especially one of collegiate status, could not teach longer and save money for a year's work instead of coming only for six months or for a single quarter.

It is, of course, the regular session that one would like to see at once made continuous; the summer session should provide as now for teachers for whom a continuous year's work may be out of the question, until the elimination of low grade certificates may reduce this need. But here, also, the work should be organized in sequence in effective curricula, even tho the advantage of consecutive attendance would have to be sacrificed. It would be a simple matter, for example, to offer the successive quarters of a two-year curriculum in succeeding summers, thus making it possible for a teacher in one full year and three summers to complete the course. At the same time duplication could be avoided, except in so far as might be actually necessary to handle the numbers, by arranging to distribute the work of different quarters among the schools. To be assured of finding the particular quarter's work needed complete at *some* school in the state would be a sufficiently reasonable provision for the irregular student at

¹ The questions were asked at Maryville, Warrensburg, and Kirksville. Twelve hundred sixteen, or 94 per cent of those reporting, voted for the first proposition, and 775, or 70 per cent of those reporting, voted for the second.

² At Kirksville, however, 96 per cent of the students voted in favor of consecutive sessions and 76 per cent for their practicability.

the summer sessions. This naturally presupposes intimate coöperation between the schools on a carefully worked-out plan.

4. *Admission and Classification*

a. REQUIREMENTS FOR ADMISSION

Conditions of admission to the normal schools in Missouri are determined partly by law and partly by the regulations of the various boards of regents. The law of 1870 establishing the first two normal schools permitted the board to require a declaration on the part of each entering student that it was his intention to teach in the public schools of the state.¹ This requirement was made compulsory in 1879,² and is still in force.³ Such declaration is usually incorporated in some information or registration blank that the student is required to sign as a whole. The provision is thus technically satisfied without giving it what in some cases would be unwelcome prominence. Maryville does not require the declaration at all. In the catalogues Warrensburg alone gives it due emphasis; the others omit all reference to it. To meet the obvious intent of the law, a separate signature on a duly specific and formal blank should be demanded, and notice of the requirement should be given in each catalogue. Candidly interpreted, the declaration is a genuine and important condition of admission, and when duly emphasized, may furnish valuable moral support to a school that seeks to concentrate its effort. The experience of Warrensburg is ample evidence of this.

REGULATIONS OF LOCAL BOARDS

The single board in charge of the first two schools set up certain further conditions. The first was an age limit of seventeen years for boys and fifteen years for girls, with the understanding that in case the student agreed to take the full course, he would be admitted one year earlier.⁴ These age limits underwent various fluctuations in the several schools, soon (1876) dropping to fourteen for both boys and girls, and later rising to fifteen and sixteen. At present the matter of age scarcely enters into consideration, the question being one of articulation with the elementary school. The only other original entrance provision of importance was an educational qualification stated to be "an examination as for a second grade county certificate"⁵—at that time the lowest teaching certificate in use, and equivalent at best to the requirements of the eighth elementary grade. The manner of the enforcement of this second requirement deserves special consideration.

¹ *Laws of Missouri*, 1870, page 136, section 10.

² *Revised Statutes*, 1879, section 7167. ³ 1918.

⁴ *State Report*, 1871, page 139. ⁵ *Ibid.*

EXAMINATION *versus* "PROVING UP"

Whatever the prerequisite to regular membership in a Missouri normal school, it is improbable that any student, otherwise acceptable, was ever refused admission to the institutions on account of deficient scholarship. For extremely backward students a "sub-normal" or elementary department with courses of varying length appears to have done duty throughout the first thirty years. Nevertheless, during this early period admission to the normal school proper was guarded by an examination demanded of all, — at least, of all those who had not already been examined for a teacher's certificate. Provision for such an examination appears in some form in practically all of the catalogues until 1900.¹ Meanwhile the few applicants holding advanced standing from colleges and seminaries,² and later those coming from the high schools as they developed, were admitted with due credit for work already done, but the difficulty of estimating the precise value of such work brought from every variety of institution led to a practice that has since wrought havoc in the institutions. Examination of such a student was waived out of deference to his "grades," but to test its worth the credit was not formally accepted until the student had "shown that he could do satisfactory work" in the classes where such credit placed him, and it became the general custom, as a matter of precaution, to defer even the record of the advanced credit until shortly before graduation.³ Experience has taught other higher institutions that this policy is disastrous. A scheme that makes a large material advantage to the student contingent upon his performance in a single course puts an enormous strain upon the personal equation of both teachers and administrators. A wise policy reduces this to a minimum; the teacher's task in fairly judging a student's deserts in his own course alone is delicate enough, without weighting the scale with a whole series of other consequences. It would seem to have been a better plan to keep on requiring examinations until the institutions whose credits could be trusted were recognized, and then to accept credit from them unconditionally. If students from schools holding this privilege made poor records, the school could then be deprived of the certificate privilege, and its students be again required to take examinations; in any case the status of any given student would always be settled. Elsewhere this plan has worked to the mutual satisfaction of schools and students. Certain efforts were made in this direction by utilizing the "approved list" of high schools drawn up by the state university, but the other method seemed plausible as well as more simple; it was certainly far more

¹ The following announcements are typical: "The first Monday of each term will be devoted to examination for admission to the different classes. After examination, students are assigned to the classes which they are qualified to enter." *Catalogue, Kirksville, 1879*, page 18. "Students are admitted to any term or year on examination." *Catalogue, Warrensburg, 1889*, page 23. "The preliminary examination for admittance to the normal classes is both oral and written. Students will be admitted to any class upon passing a satisfactory examination in the preceding studies of the course." *Catalogue, Cape Girardeau, 1897*, page 7.

² Reference to these begins in the catalogue of 1882 at Warrensburg, and in 1885 at Kirksville.

³ Thus: "Grades accepted by the departments will not be placed on the general record until the last term of the year in which the student expects to graduate." *Catalogue, Warrensburg, 1899*, page 14. See similar statement, *Catalogue, Kirksville, 1897*, page 28.

agreeable to the student to be released from examinations, and the policy was soon generally adopted.¹

The decade beginning with 1900 brought rapid expansion and reorganization. Since 1882 Warrensburg, and probably the other schools, had allowed high school graduates to finish the course in one year.² In 1899 Warrensburg increased her requirements to two years,³ for graduates of approved first class high schools, and in 1904 this was agreed to by the others. According to the plan of this agreement, more time was to be required of graduates from second and third class schools, and applicants from unapproved schools not holding teachers' certificates were to be examined; Kirksville, however, reserved the right to assign any credentials whatever value she chose without examination.⁴

REORGANIZATION OF THE SECONDARY PROGRAM

After 1904 a student who went thru high school required six years beyond the eighth grade to obtain his normal school diploma, while students who went to the normal school directly from the eighth grade could combine their secondary and professional studies, and finish both in four or five years' time; and large numbers did so. The next problem, therefore, was to convert this old four-year normal school curriculum into a six-year curriculum requiring as much from students who attended the normal school only as from those who first completed high school. This duty was not frankly faced. It could have been well discharged in one of two ways: either by adding two years of genuine collegiate and professional work to the old secondary curriculum, or by pushing up the old course and building in two good years of secondary work at the bottom. Neither alternative was followed; the old curriculum was indeed advanced by two years, but instead of requiring new work below it, the old "sub-normal" entrance requirements were transferred bodily to this uncertain gap between the elementary school and the old curriculum which had been thus advanced.

The same eighth grade subjects were covered, a little more intensively to be sure, in one or two semesters, so that any mature youth could fill out irregularities in his

¹ "Graduates of High Schools, approved by the Missouri State University, will be admitted to advanced standing without examination." "Applicants for advanced standing who have done work out of school under the instruction of competent teachers may be given credit for such work, but the faculty will reserve the right to examine," etc. *Catalogue, Cape Girardeau*, 1902, page 12.

"Graduates from High Schools and Academies enumerated in the 'Approved List' of the University will be admitted to classification on presenting certificates of graduation, but before final credit is given the student must establish his claim by satisfactory work. The usual entrance examinations are for classification only. In lieu of these a candidate for admission must present a valid certificate of any grade, or recent standings from any good school." *Catalogue, Warrensburg*, 1894, pages 24 ff. Reference to the "approved list" of the university was omitted in the next catalogue.

"Grades furnished from Colleges, High Schools, and Academies will be accepted by heads of departments after the students presenting the same have shown approved proficiency in similar studies." *Catalogue, Kirksville*, 1894, page 16.

² Apparently Warrensburg alone made definite provisions for such students in a special curriculum.

³ *Catalogue*, 1899, page 12.

⁴ After stating the terms of the agreement, the Kirksville catalogue proceeds: "But this Institution prefers to admit and classify all students on the evidences of scholarship furnished by their grade cards, certificates, diplomas, etc., and without examination. . . . We therefore seek to make rules of classification so flexible as to recognize fully the merits of each school and each individual student." *Catalogue, Kirksville*, 1904, page 18.

elementary schooling, and still count it all as secondary work.¹ This case of apparently bad faith with the high schools, the best of which were now requiring in their first year a full program of secondary work in algebra, ancient history, Latin, and so forth,—almost exactly the same as the first year of the regular normal program two years beyond,—had an explanation that should not be overlooked, tho it hardly justifies the course taken. Most of the students coming to the normal schools were attending but a few terms in order to obtain teaching privileges, and were not bent on following out a complete curriculum.² For them good review courses were essential. The better students who did go on, however, especially those who had taught, passed over these “review” courses hurriedly, and after a few weeks’ work to “prove up” presently found themselves in possession of a mass of credits representing half of a high school curriculum, but leaving no corresponding deposit in their education. It would have been better for the schools at this point either not to have counted such work for secondary credit, or else to have created real professional courses of such a nature as to require the attendance of all who had not actually taken them.³

“PROVING UP” POLICY ESTABLISHED

“Entrance requirements” were thus all but completely swallowed up in the reorganized secondary program. Examinations for admission disappeared,⁴ and “proving

¹ The school at Kirksville, after trying in vain to merge its “sub-normal” course with the eighth grade of its “Model School” (*Catalogue*, 1901, page 27), solves the problem thus in 1902 (*Catalogue*, page 18): “Sub-normal Course. A thorough and systematic teachers’ course in the subjects that all teachers must know. One class in arithmetic, rigorous, searching, thorough, old-fashioned mental and written arithmetic. One good thorough-going grammar class [etc., etc., for history, civil government, and physiology]. It is not an ordinary course. It is not by ordinary men. *It is not eighth grade work.*” (Our italics.) But the English department in the same catalogue (page 32) states that this grammar class is for “all who are deficient” precisely as it did in the years before when it was clearly eighth grade work (*Catalogue*, 1901, page 20).

² The importance of these first two years for low grade teachers is evident from the Rural Certificate Course, which until 1915 required nothing further.

³ The two-year gap existing after 1900 between the elementary school and the normal school curriculum was first consistently filled at Warrensburg in 1909, by inserting two years of English, algebra and geometry, ancient and modern history, foreign language or science. Kirksville since 1908 has scheduled two years’ work, of which the first consisted of “common school subjects” repeated. Cape Girardeau in 1908 adopted a secondary course of fifteen units including the same review courses. Springfield did the same with fourteen units, raised to fifteen the next year. And Maryville in 1911 laid out two full years’ work for a “Common School Certificate”—a mixture of reviews with high school and professional work.

⁴ The evolution at Kirksville is interesting; significant points are italicised.

Catalogue, 1899, page 14: “All persons applying for admission to the Sub-Normal School course shall be subjected to a *thorough examination* in,” etc (five subjects). “All persons applying for admission to the Normal School proper shall be subjected to a *thorough examination* in all subjects of the sub-normal school course and no person whose average falls below 60% shall be admitted to either.”

Ibid., page 10: “MINUTES OF THE BOARD OF REGENTS, June 15, 1899. Standing obtained recently in High Schools, Academies, and Colleges on the approved list of the State University will be accepted by this institution, after satisfactory *examination in any one subject* agreed upon by the applicant and the President of this institution.”

Catalogue, 1900, page 36: “Standing obtained recently in High Schools, Academies and Colleges on the approved list of the University will be accepted by this institution.” “All students are requested to bring with them their grade cards, certificates, diplomas and other documents showing their standing in schools heretofore attended by them.” (No mention of an entrance examination occurs in the catalogue.)

Catalogue, 1901, page 43: “Bring all your grade cards, certificates and diplomas.” “*Avoid examinations* by bringing these credentials.” “*Examinations* on entering a school are as *worrisome* to the Faculty and President as they are to the student.”

Catalogue, 1902, page 8: “If the students maintain themselves creditably in the advanced work . . . the grades brought from other institutions are approved.”

Bulletin, December, 1902, page 5: (This plan) “simply places every student on his own merits. . . . It gives each student opportunity to graduate in the shortest possible time.” “*We desire [page 6] to avoid the labor, annoyance*

up" became the standard procedure. By this system credentials, of course, lose their importance, and are neglected in proportion to the extent to which it is proposed to rely upon a student's class work. Warrensburg alone appears to demand and file specific original credentials for all grades allowed.¹ All of the schools follow the practice of admitting and classifying the student on his own representations, and not until he becomes definitely a candidate for a certificate or diploma are his papers asked for even at the schools that require them for graduation. In granting advanced standing, none of the normal schools, save Warrensburg, appears to distinguish effectively between approved and unapproved high schools as rated by the state superintendent. When such distinction is made, the tendency is to discount more or less the total amount of unapproved credit without reference to individual subjects. Thus eight units from an unapproved school may be cut down to six to penalize the school, but no notice will be taken of the student's deficient preparation in the subjects studied.

UNIFORM ADMINISTRATION OF ADMISSION REQUIREMENTS NEEDED

The experience of the normal schools in the administration of their entrance requirements contains some instructive suggestions. In the first place it is clearly impossible to arrive at a satisfactory method of procedure without coöperation, either voluntary or enforced. To have one of five state schools that exist to do the same work advertise admission by examination and another offer to take any one "on his merits," otherwise determined, while the policies of the rest range somewhere between, is demoralizing. It shakes public confidence in the integrity of the system, and it leads to evasion and equivocation in the institution. School authorities that would have been glad to follow the rating of the state superintendent freely admitted that it was impossible "because the others don't do it." No one knows exactly what the "others" do, but suspicion and rumor, together with the tales of migrant students, keep a tangle

and embarrassment of examinations. Where a student has no school credentials, a letter from some well-known teacher or other person connected with schools will be helpful."

Thus the "merit system" was firmly established and "No Examinations" became a headline attraction in the prospectus (*Bulletin*, March, 1906, page 4). From this time on, students from any source were welcomed at Kirksville and "proved up" by placing them where they claimed to belong regardless of credentials, and if they could "do the work,"—that is, if they could get a passing mark,—earlier claims, often even of a dissimilar character, were validated.

Cape Girardeau adopted the same plan, more reservedly, but no less effectively:

Catalogue, 1904, page 12: "Other applicants for admission may be admitted by examination, or on presentation of such other evidences . . . as the faculty may require."

Catalogue, 1905, page 15: Same statement, omitting reference to examinations.

Catalogue, 1908, page 21 (referring to students without credentials): "The usual practice is to classify a student as seems best after looking carefully into his work done in other schools before entering the normal school. An entrance examination is not usually required."

In the catalogue of 1914 reference is made to "completion of an eight-grade school, or work of equivalent value," as a minimum requirement, but allusion follows to possible "conditions" and no mention is made of examinations.

Springfield, from its establishment in 1906, accepted and practised the Kirksville doctrine: "without examination" is the only formula contained in its bulletins.

Warrensburg alone, of the five schools, has maintained in its bulletins a clear and consistent examination requirement for such work as could not be certified on the basis of state (specified in full after 1908) approval. Its procedure with students lacking even elementary school diplomas has been much the same as in the other schools.

Maryville followed Warrensburg's specifications until 1910, when the conditions of admission became vague and references to examinations were omitted.

¹ See page 336.

of mutual charges always afloat. When Kirksville in 1904 refused to enter into a joint agreement, and proceeded to let down the bars to any one, the other schools were practically compelled to follow at a greater or less distance, with the result that each school has since practised a vague compromise governed largely by its "interpretations" of the candidate, and of his papers when he had any.

It is quite indispensable that in a matter of this sort unity should prevail on the basis of clearly reasoned principles, and that such agreement should include not only the principles but their actual administration. In event of the consolidated administration proposed elsewhere, the permits for admission could be issued at a central office. Even under present conditions, the simplest possible arrangement would be to have all credit for admission and for advanced standing for any normal school first determined at the state department, the agency already charged with inspection and rating of the institutions from which nine-tenths of the students come. This should be done regardless of the school at which the credentials were to be presented; the student would then make his choice.

WHAT SHOULD BE THE METHOD OF ADMISSION?

As for the terms themselves on which students should be admitted, it is sufficiently obvious that the "proving up" method is a delusion. Two main interests are involved: first, the standards of the normal schools, and second, the welfare of the educational system from which their students are drawn. As already pointed out, the admission of students who are untested or unreliably vouched for introduces two seriously disturbing influences: the presence of such students tends, in proportion to their number, to change the standard of instruction and achievement wholly for the worse; and secondly, each is likely to become a "special case" unwarrantably engaging a teacher's sympathy for himself instead of promoting devotion to the soundness of that remoter public service for which he is being prepared. The poverty and vocational need of many such students brings an overwhelming pressure to bear on the teacher, as is substantially shown in the review of student ratings.¹ Any rational system of admission that will prevent this relaxation of classroom standards, and tend to obviate what amounts to a perversion of the normal school teacher's singleness of motive, should be welcome.

The other consideration suggested is the part played by the normal school as an institution in the educational structure of the state. It may be granted for the moment that each normal school could "prove up" each applicant successfully and without damage to itself, and that it has done so, receiving its students from all kinds of schools upon virtually the same footing. Even thus it is important to consider what difference would now appear in the high schools of Missouri if these five normal schools had from the outset announced and enforced their new joint requirement² as stated in the Springfield catalogue of 1917: "All persons who expect credits for work done

¹ See page 321.

² Entered into since this study was begun.

in unclassified high schools or unaccredited academies or colleges will be required to take examination." "No one can afford to attend an unapproved school."¹ The influence of the university in improving and maintaining the standards of the larger high schools thru just this means has been incalculable; the normal schools, working in constant touch as they have with the smaller schools, could certainly have wielded the same or even greater influence in guiding their development. When this is the case, surely no school or group of schools has the right to stand out from concerted action for the sake of independent ambitions. As the Missouri schools have come to see, a fair and thorough examination is the only just form of entrance requirement for persons whose educational history is not understood and vouched for by other competent agencies. Until well-standardized, objective tests can take its place, any other method is as demoralizing as that of a bank which should extend unlimited credit to a new customer without enquiring into his resources.

Second in importance only to the examination requirement for admission from unapproved schools is the need of requiring students who offer approved credit to bring, in due form, reliable evidence of their past work. This again, aside from safeguarding the normal school, involves the twofold purpose of breeding in the student a respect for educational requirements at least equal to that for ordinary business obligations, and of keeping the contributing elementary and secondary schools conscious of their duty on the same account. During the Missouri visits it was found that such normal schools as persistently required proper evidences of previous training had apparently little difficulty in securing them, while those that failed to require them were emphatic in the assertion that the schools had no records, that it would be too much trouble for the teachers and principals to provide them, that to ask them was unjust to the student, and similar untenable excuses. As in the matter of examination for unapproved work, a relentless demand for a clear, signed, and dated statement of the student's previous work, on a blank issued preferably by the state department, and deposited in original form with the school, would serve by just so much to stimulate the small high school to clear thinking and a sense of its responsibility to its pupils.

b. CLASSIFICATION OF STUDENTS

The prevailing principle of classification of students in the normal schools has been described above: the student states orally his qualifications and is classified accordingly. In certain subjects, such as language and mathematics, a respect for sequence must of necessity be preserved, but only such as is unavoidable in that subject. It should not be supposed that there is no modal form of curriculum; the majority of students can hardly fail to follow a certain broad groove. But the real test of such a system is to be found in the number and character of the exceptions permitted. These leave an observer with the distinct impression that each course is regarded much as a pot of dye in which any applicant for credit may be dipped without regard to his

¹ *Catalogue, Springfield*, page 13.

age, maturity, scholastic attainment, or teaching experience, or to the relation of these various factors with the corresponding characteristics of other members of the class. The asset of similar mental equipment in a class unit setting out upon a coöperative intellectual undertaking seems wholly unprovided for if not undiscovered; where it exists, it exists by accident.¹

PROCEDURE AT KIRKSVILLE

The system operates with the greatest latitude at Kirksville, where it started. "Those who remain . . . know what they have to take; those . . . from outside know what they need. So classification is completed in less than a day. Indeed classification almost governs itself."² "Almost" seems superfluous in describing the practice of 1915. On the opening day all teachers range themselves about the large gymnasium and the student moves from one stand to another cafeteria-wise, making up his program as best he can from the catalogued offerings. No teacher is responsible, and each naturally desires a full department; hence, as one high in authority expressed it, "a student may take whatever he can get a teacher to sign up to, and that is almost anything." The bewildered newcomer chooses his faculty adviser *after* the registration, lest there be undue influence brought to bear on his elections. Even then these advisers are denied access to the credentials and records of the advisee, if there be any, so that their advice is never of other than a general nature.³ Lacking official direction, the student consults some friend who knows the school. It was said that the members of the Y. M. C. A. and Y. W. C. A. (!) were especially helpful in counseling students as to what courses to take, but students declared that usually "one must expect to lose the first quarter's work" because of not knowing how to choose. The head of the institution may be called upon to settle disputed points, but endeavors, as he explained, not to interfere unless obliged to. The whole procedure impresses one as a plan primarily devised to ensure to each teacher nominally equal terms of competition for students, with the president as umpire in the contest.

COMPOSITION OF CLASSES THUS FORMED

The composition of the classes put together in the above fashion agrees with what one would expect under the circumstances. A class in the "Teaching of Advanced English" was typical, — excellently led, but found to consist of students few of whom had yet had any collegiate English, and including several who had not yet completed

¹ Theoretically there is a simple and efficient guide for this system of classification. As explained especially at Kirksville, Cape Girardeau, and Springfield, each student is watched carefully after enrolment, and if he cannot "do the work" in a given class, he is dropped and required to enroll elsewhere. Aside from the confusion to the class and loss of time to the student, this plan might work if carefully administered, but the class records of these three schools seem to show that students neither fail nor are dropped in any such proportion as a system of this kind would inevitably require. (For further discussion see page 322, note 2.)

² *Bulletin III*, No. 2, 1903, page 14.

³ At other schools, particularly at Cape Girardeau, a system of "sponsors," assigned to a student according as his work is distributed, is used with apparent effectiveness to keep the student advised on all features of his work including the making of his program.

required secondary English, yet all were expecting to teach English in high schools, and were receiving their sole professional instruction for the purpose at this point.¹

Subjects are not confined to students of a certain "year" or grade of advancement, and it is impossible to speak of such groupings at Kirksville. Thirty-seven classes² were carefully analyzed as to the attainments of their members, and of these six contained students having to their credit sufficient work to be rated in each of the eight years of the secondary and college curricula; one class only was confined to students in as few as two such grades, and the median as well as modal range of distribution covered five years. Most classes showed a certain modal "year" of membership, which made it possible to calculate the proportion of members above and below such mode. No class proved to have fewer than thirty per cent, while over a third had more than sixty per cent of their membership outside of the normal "year" of advancement. More than two-thirds of the classes contained both secondary and collegiate students; thirteen were attended chiefly by secondary students and the same number contained a majority of college students. Two had secondary students only and seven had college students only; two were confined to students of the second, third, and fourth college years.

Similarly with the elements of age and teaching experience: students less than twenty years of age, usually with no teaching experience, are classified indifferently with students twenty-five or thirty years of age, or even older, who have taught for many years. Among the thirty-seven classes above examined, twelve had more than ten per cent of their students in each of these extreme age groups; three had twenty per cent in each extreme group. In point of teaching experience of their members, these thirty-seven classes ranged from three, in which ten per cent or fewer had experience, thru every percentile decade to two classes in which one hundred per cent had had experience.

The conditions just described at Kirksville are not peculiar to that school, but occur elsewhere even more strikingly in some respects. Comparisons should not be made, however, between the schools, as the classes analyzed, tho fairly representative of the school, are not chosen equally from the same subjects or departments in each school, nor do they constitute the same proportion of all the classes in each school.

Such a mingling of age, standing, and experience involves necessarily a like jumble of aims in all but a very few of the courses, and with this the educational validity of the system breaks down completely. What can an inexperienced, seventeen-year-old girl, part way thru her secondary work and expecting to teach in a one-room school, find in common as a fellow student with a college woman twenty-five years of age who has taught for several years and is finishing her preparation for teaching

¹ At other schools, the same condition appeared in classes visited: a class in psychology with all years of high school represented; a class in geography varying from poor eighth grade to good third year high school: a class in plane geometry containing new high school students and several teachers, who had taken the subject and had come back for review.

² These were selected with the intention of getting from each department a fair representation of classes that would test the features here discussed.

high school English? Yet the ancient and mystic formula that "they are both to be *teachers*" is invoked as overshadowing all distinctions, even the most glaring. To any one not under the spell of this unctuous myth, such combinations indicate nothing but thoughtless and wasteful administration, or worse—a multiplication for the sake of collegiate impressiveness of parallel electives, most of which would have to disappear if a rational classification were enforced. If it be argued that all this was due to the variety of material and situation with which the school was confronted, the reply is simply that a school that claims to have recognized standards should select and work its material to these standards, and not adapt its standards to whatever conditions its over-ambitious program may produce.

In their method of classification the other schools differ considerably from Kirksville. Warrensburg, Cape Girardeau, and Maryville entrust the matter to experienced committees of the staff, requiring, except at Warrensburg, the final approval of the president in each case. At Springfield the president himself undertakes to perform as much of the actual classification as possible, but is assisted on opening days by selected members of the staff. These methods, especially the first, seem to have resulted in a more discriminating classification than at Kirksville, where the students in effect classify themselves and advice is given only when requested, but the salutary effect is probably still greater in increasing the sense of security and direction that the student must feel in having authoritative guidance.

FIXED CURRICULA THE ONLY SOLUTION

The simplest and, in the judgment of the present critics, the only thoroughly safe way out of such difficulties as have been described consists in the establishment of fixed professional curricula designed to embody the best possible training for definite objectives, and the admission to such curricula of those students only who are fully qualified to undertake them. Normal school attendance outside of full participation in such curricula should not be permitted until after graduation, and then only for advanced courses especially designed and offered for teachers in service. By this arrangement departmental rivalry vanishes and "classification governs itself" in the only legitimate fashion. The problem of varying attainment and different aims at once disappears; these gone, the difficulties of mixed age and experience grow vastly less, and ultimately become negligible even without rigid regulation. It is firmly believed that the normal schools can reach their greatest effectiveness only by this course.

If, on the other hand, the present elective system must be retained, the matter of classification should at once be erected into a capital problem for the expert study of the department of education, to which it naturally belongs, and its administration should be entrusted to skilled officers—not the already overburdened presidents—detailed for the purpose, who will give each case adequate attention from a purely educational point of view. Classes should certainly be reduced to a relatively homogeneous standard of attainment. The reasons for this are obvious to any one who has seen

young students suffer from the aggression of advanced monopolists in the same class, or who has seen the real quality of an advanced class vitiated by the teacher's attempt to meet all stages of mental development.¹ Such a measure would involve at least the anchoring of courses to certain years of a student's progress, and thereby would do much to clarify the situation. Such an arrangement likewise would offer a fair solution for the problem of transition from secondary to college work—the line at which the normal schools have hitherto felt most acutely the shortcomings of their system of classification.²

5. *Student Programs*

SPEED THE STUDENT'S CENTRAL CONSIDERATION

The question of how much work a student may "take" conditions the further question of how soon a student may graduate, and the latter may not incorrectly be regarded as the central consideration, from the student's point of view, in his attendance upon a Missouri normal school. It is true that in other states the normal school may be and is quite as much of a vocational institution as in Missouri, but when for a fixed and orderly professional program covering a definite period, there is substituted an elective scheme which may be followed a term at a time, in summer or in winter, in almost any combination of studies, and having a given number of points as the chief goal, a completely different attitude may arise. Such is the case in Missouri. Instead of facing complacently the fixed requirements of his course as a whole, the ambitious student is bound to ask: What is the shortest space of time into which I can crowd enough courses to get the sixty-hour, ninety-hour, or one hundred-twenty-hour diploma, as the case may be. And this demand for speed is undoubtedly the potent factor in many irregularities. Granted the loose system above outlined, much can be explained. Students need certificates and diplomas as capital for earning power, and the normal school is the only official agency for their issue without examination. Pressure is very great to hasten them by the validation of old and questionable "grades," the conversion of experience into credit, the shortening or omission (with credit) of "non-essential" courses, the introduction of private "courses" by sympathetic teachers, as well as, finally, by programs swollen out of all proportion to the ability of the student. The hope and purpose of the institutions to increase their numbers for the sake of the weight a large school has with the legislature works toward the same

¹ In view of the fact that general mixture of class membership has been customary in the normal schools for many years, it is surprising to find that of the one hundred and four instructors who expressed themselves in writing on these points, as many as seventy-two felt that the situation was damaging to the schools and should be corrected; the rest thought that little or no harm resulted, tho some of these had classes in which the difficulty did not exist. The following are some of the comments: "Discourages the weak; bores the strong." "Strong students set impossible pace." "Hard to adapt reference work and general discussion." "Slow require much specific attention." "Immature overwork and are shy." "Time wasted, interest lags, standards lowered." "Hard to adjust methods to all." "Viewpoint too varied for uniform work."

² A simple rule announced at Cape Girardeau since 1910 requires that all secondary work must be done or scheduled before collegiate work may be taken. So far as *amount* of work is concerned, this would appear satisfactory as applied to such students as had no access to high schools. This rule is of little aid to any particular course, however, unless the course be limited to students of a certain grade or at least to those having certain prerequisites.

end; to attract and hold students, speed is made easy by the allowance of credit for every form of student activity—society work, debating, baseball; by the removal of entrance requirements, by abandoning or devitalizing class examinations, by the low pass mark, by the frequent repetition of courses, and by the omission of pre-requisites.

MUCH PRESSURE FOR EXCESSIVE PROGRAMS

Of these various methods of acceleration the excessive program has been the most obvious to the student.¹ Without some formal system of defence, the petitions of the student are irresistible: he pleads that any number of mere review courses ought to be allowed; one extra subject will bring the diploma by August, when funds are gone, and ensure, thereafter, a school appointment; why make an experienced teacher of thirty follow the program of the student of eighteen? and so forth. Furthermore it is true, certainly, that a few students in every group have unusual mental grasp, can satisfy thorough examinations by private work, and can maintain a heavy program at a high standard. For such minds the best possible facilities should be arranged, but the observer has misgivings when such students are said to number a third or more of the total enrolment.

PRESENT PRACTICE: COLLEGIATE PROGRAMS

Three of the schools, Kirksville, Warrensburg, and Maryville, after much laxness earlier, have dealt with this situation successfully, and in 1914 were enforcing limitations of student programs in a systematic and adequate manner.² Noteworthy, too, is the extent to which Warrensburg has reduced partial programs, and has brought the great bulk of her attendance to a common load of work. Springfield has not been so successful. More than one-fifth of the year's programs are above normal, while nearly one-third are below.

The situation at Cape Girardeau differs materially from that at the other schools. Previous to 1907, the twenty-hour, or four-unit, standard of the other schools was in force. In that year the requirement for the junior and senior college years was reduced to fifteen hours per week, doubtless in order to approximate more closely regular college programs.³ In 1908 the program of the first two years was reduced, and a minimum of one hundred eighty term hours, equaling one hundred twenty semester hours, was announced for the degree of A.B.⁴ This was clearly a credit basis of fifteen hours per week, and has been maintained ever since; the maximum was set at fifteen hours for junior and senior college classes, and eighteen for freshman and sophomore classes, except as increased by faculty permission.⁵

¹ One normal school graduate seriously recommended attending the school by single terms on the ground that one could load up for a term with an amount of work intolerable for the year, and thus save time in the end.

² See pages 434, 435.

³ *Catalogue, Cape Girardeau*, 1907, page 27.

⁴ *Ibid.*, 1908, page 36.

⁵ *Ibid.*, 1910, page 33.

On this basis, program-making among the college students at Cape Girardeau came to the following results in 1913-14:¹ In the case of students attending the regular session,² one-fifth of the programs were below normal,³ and three-fifths were in excess of normal; nine per cent are scheduled for twenty hours or more per week. In spite of the formal distinction made between upper and lower classmen as to number of hours permitted, the proportions given above apply about equally to all classes. Twenty-five, or three per cent of the total number of programs, were rated as senior, and of these forty per cent were for eighteen hours or more; of the one hundred seventy-nine junior programs, fifty-four per cent were similarly extended.

Whether or not it requires any particular ability to be allowed to take a heavy program at Cape Girardeau does not appear. It is clear that forty per cent of the collegiate attendance may, by taking eighteen hours or more of class work, acquire the necessary one hundred eighty term hours of credit in three and one-third years or less. Furthermore, by the preferential system of rating, in use at Cape Girardeau since 1912, a student who does somewhat better than the average and is marked "B" is allowed fifteen per cent additional credit, and the "A" student is allowed thirty per cent. A person, therefore, who takes eighteen hours of work and secures an "A" rating receives a bonus of upwards of forty term hours' credit and may finish his one hundred eighty hours in two years and two terms, or, if he receives a "B" rating, in three years with six hours to spare. As "A" and "B" ratings constituted about a third of the school's total ratings for 1913-14, it is evident that this is no merely theoretical advantage. To be sure, relatively few remain at Cape Girardeau for advanced work,⁴ but credits earned on the above basis are carried wherever the student goes; except that, oddly enough, the school does not certify the bonus for excellence elsewhere than on its own diploma—a form of student solicitation that can hardly be commended.

Cape Girardeau shows marked differences from the other schools in the sharp drop taken in the programs of students attending only in the summer: over three-fifths are below normal, while scarcely one-tenth rise even slightly above. The other schools, particularly Kirksville, make a remarkably even showing in this respect, maintaining about the same load in both sections of their attendance.

SECONDARY PROGRAMS

The secondary programs of all five schools are comparable. Springfield is unique in permitting a great number—nearly one-third—of partial secondary programs, while Warrensburg maintains the same distinction shown in her collegiate programs,

¹ See page 484.

² The programs followed by students coming only in the summer were abnormally small, the median being actually below the normal number of hours. This disguises somewhat the situation during the rest of the year if only the total of both sessions be considered.

³ "Normal" is here reckoned as fifteen or sixteen hours. At the other schools one and one-quarter hours' credit is allowed for a five-hour unprepared course in addition to the regular twenty-hour schedule.

⁴ The proportion of collegiate programs taken by seniors was three per cent, and several of these were made early in the year before the student attained senior rating.

and brings ninety per cent of her students to a standard load of work; the remaining ten per cent is certainly ample to provide for programs that are in fact exceptional without being merely arbitrary. Cape Girardeau again far outdoes all the others in the amount of credit which she allows. In the regular session sixty-five per cent of the programs are made out for five secondary units per year or more, altho the standard definition of these units is "one-fourth of a year's work." In two years and one summer session many of these secondary students secure credit that would admit them to a college or university conditioned in but one unit of work; not to speak of the fifteen and thirty per cent bonus allowed in addition for excellence, which for "B" students would nearly cut off the above mentioned summer session, and for "A" students would fully admit without condition on two years' work with half a unit to spare. Such lavish bestowal of credit on the part of a reputable institution is an injustice to students, to other institutions, and to the public.

TIME REQUIRED FOR PREPARATION

At three schools, Kirksville, Warrensburg, and Maryville, the students were asked to report on the average amount of time spent in preparation of each lesson. The differences shown in the results were marked. The Warrensburg student of every grade spends from half an hour to one hour on his work, while at the other schools the median student spends half an hour more. There may be some connection between this fact and the larger proportion of programs at Kirksville and Maryville that have less than the standard number of hours. The more uniform achievement at Warrensburg may be due to a shortened period of preparation. At all schools the men give less time to study than the women; and in general the secondary student spends slightly less time than the collegiate student.

IS THE STANDARD OF CREDIT IN THE NORMAL SCHOOLS TOO LOW?

With the exceptions already noted, the Missouri normal schools appear to have regulated the size of student programs with success. From the point of view of the educational commonwealth at large, it would seem fair to ask whether their standard is not still too low. When four credit units is the recognized norm for a year's performance in secondary work the country over, why should four and one-half be allowed here? Certainly if these schools are to do their share in maintaining for the country as a whole a definite interchangeable standard, they should conform more nearly to the general practice in this respect.

6. *Student Rating: Examinations*

SELECTIVE FUNCTION OF RATINGS

The measurement of the results of student effort and the correct estimate of the quality of the product naturally play an important, if not decisive, part in determining the status of a given educational institution. Some means of education, such as libraries, are relatively passive; their effect must be observed indirectly. Other agencies, like most colleges and high schools, profess to organize their efforts to ensure a certain standard of assimilation of what they offer, and they assume the responsibility for ascertaining whether or not that standard has been reached. In other words, they are consciously *selective* institutions. Indeed, the standards that they set up are determined in no small degree by the extent to which they propose to serve a selective function. If all who present themselves at a given institution are uniformly accepted and passed thru its processes, it is justly inferred that no standards of selection exist; if selection is desirable at all, it must of necessity occur later, when these individuals are in active service. If, on the other hand, a third of the candidates are disqualified, either at entrance or in the course of their training, from receiving final approval, it is a reasonable inference that the institution is at least taking an active part in defining its product and in rejecting unsatisfactory results, whatever may be said of the appropriateness of its requirements.

THE PRACTICE IN MISSOURI

For a period of about ten years, from 1875 to 1885, the Missouri normal schools made use of an examining board consisting of the presidents of the three institutions existing at that time and the state superintendent of public schools. Candidates for graduation were first recommended by the teachers, and were then examined before this board, which met successively from school to school. Before and after this period, the responsibility for determining the requisite qualifications of a graduate rested wholly with his instructors. The same plan is followed now; each term-course, that is, each two-and-one-half-hour unit of each curriculum, is complete in itself, and contributes its rating to the final result, unmodified by any general test. What these ratings were for the year 1913-14 is shown in a table elsewhere which is complete for the entire year for all of the schools.¹

A clear idea of the situation may be had simply by inspecting the proportion of failures when arranged in order of departments and divided between secondary and collegiate subjects.

Secondary classes, made up of fresh arrivals, belated students, applicants for "approved grades," and other unsorted material, show but five per cent of rejections, with a maximum of eight per cent in English; while collegiate classes in which the professional work of the school is concentrated, turn back fewer than two in a hundred

¹ See page 435.

OPERATION OF THE NORMAL SCHOOLS

PERCENTAGES OF FAILURE IN SECONDARY AND COLLEGIATE COURSES

<i>Secondary</i>		<i>Collegiate</i>	
English	8.3	English	2.7
History	6.5	Mathematics	2.5
Foreign Languages	6.3	History	2.3
Mathematics	5.9	Professional Subjects	1.8
Music	5.4	Household Arts	1.8
Professional Subjects	3.9	Science	1.4
Science	3.6	Manual Arts	1.4
Manual Arts	1.6	Music	1.0
Household Arts	1.1	Physical Training	.7
Art and Expression	1.0	Foreign Languages	.5
Commercial Subjects	.9	Library Economy	.3
		Art and Expression ¹	4.4
		Commercial Subjects ¹	3.4
All Subjects	5.4	All Subjects	1.9

registrations, in spite of the number of fresh and untested minds that come in from all sorts of high schools. The actual proportions range from one and three-tenths per cent at Kirksville to two and six-tenths per cent at Springfield. It was generally urged in explanation of the low proportion of failures, that these had been forestalled by shifting during the term those who were unable to keep up; they would therefore appear among "dropped" students. Further enquiry showed, however, that most of these persons probably left their classes for other reasons than failure.² The total index of selection, even with every allowance made, is undeniably small. It is not likely that the Missouri normal schools make any greater effort to correct their initial classification than do good institutions elsewhere, yet these other institutions show a normal elimination that is much higher. Most of the Missouri normal schools take pride in the fact that their ratings follow the normal probability curve as emphasized latterly at the University of Missouri, but as they appear to consider this

¹ The high proportion of collegiate failures shown in the departments of Art and Expression and in Commercial Subjects is due to one school in each case and is evidently exceptional.

² "Dropped" students may have dropped a course in order to lighten their work, or to enroll in a course better suited to their degree of advancement, or they may have left school altogether for outside reasons. It is of some importance to know which of these events occurred. Omitting Maryville, the schools lost in 1913-14, 531 students, who left in mid term before their work was completed. The reasons for these withdrawals could not be ascertained, but it is not likely that they were other than would be true of a similar group in any year, and in 1917 the schools explained withdrawals of this nature as follows: At Kirksville, in the fall term of 1917, students withdrew to take teaching positions, or because of sickness, or because they were needed on farms or in stores, but none withdrew because of failure. At Warrensburg, "leaving school before the end of the term, as a general thing, is caused by sickness or the need of their services at home. There is hardly ever a case on account of low grades." At Cape Girardeau, the largest number left to teach, others on account of sickness, business, marriage, or finances, and about one-eighth because of failure. At Springfield, exact numbers were not available, but eight per cent was given as the regular annual mid-term loss, and failure was assigned as the last of four reasons for it. On the whole, ten per cent would seem a fair allowance for the failures among these complete withdrawals. Assuming that each withdrawal from school would affect an average of four subjects, a total of 2124 canceled registrations would result, ten per cent of which might be for failure. There being but 2178 canceled registrations all told from these schools, the balance of 54 cancellations must account for students who dropped their courses but did not withdraw from school. Distributed among four schools and throughout four terms, this number of changes in classification is hardly important, even if we assume, as is scarcely credible, that all changes not due to withdrawal were due to failure. On the whole, one must conclude that dropping students from class for the purposes of better classification is not a marked feature of Missouri practice. (The contribution of Warrensburg to the above calculation is for 1915-16.)

distribution as applying to their "passing" grades exclusively, its use loses significance.

The order of departments in respect to failure is noteworthy. Altho these are schools for the preparation of teachers professionally, the main selection in collegiate as well as secondary courses is exercised by the academic departments of English, mathematics, and history; professional subjects and household arts are tied for fourth place.

COMPARISON WITH HARRIS TEACHERS COLLEGE

The most significant comparison that could be made in this matter is with the Harris Teachers College at St. Louis.¹ The present regulations there admit without examination only students having average high school records equal to the minimum general average of the upper two-thirds of the graduates from St. Louis high schools. Previous to 1912, however, the college admitted any graduate from an accredited four-year high school, and from September,² 1910, to 1913 had had three hundred thirteen graduates on this basis. Eighty-five per cent of them came from St. Louis public high schools—admittedly a superior system of schools—and were therefore probably better prepared for academic work than the group attending the state normal schools. The table below shows the failures of these graduates in the course of their two-year curriculum. About sixty others dropped out before completing the course, "many of them on account of inability to measure up to the standards set by the college." The failures of these latter students would of course largely increase the percentages were they included, as similar failures are included in the tables from the state schools.³

Altho in one case we are considering the failures of a given group throughout their course, while in the other case we have all of the school's ratings for a given year, the results seem sufficiently comparable for our present purpose. As already pointed out, the terms of comparison favor the state schools, yet they fall far behind in their proportion of selection.

It would at first appear that the same relative order of departments occurred here as in the state schools, and that the professional subjects were low in the list. It should be remembered, however, that at Harris Teachers College the courses in English, arithmetic, history, and so forth, are all strictly teaching courses that bear directly upon the students' future work, whereas at the state schools they are of an almost

¹ Lest Harris Teachers College be regarded as exceptional, a state-supported school outside of Missouri may be cited. The state normal school at Upper Montclair, New Jersey, exhibits a proportion of failures during the second half-year, 1917-18, of 5.5 per cent. The critical subjects are: English grammar, 14 per cent; arithmetic, 11.4 per cent (first term alone, 28.8 per cent); History of Education, 10.6 per cent.

At the University of Missouri during the same year for which the state normal schools were studied, the failures in "under courses"—those most comparable with the collegiate work of the normal schools—numbered 5.6 per cent in the first semester, and 6.7 per cent in the second semester. The corresponding freshman failures in the College of Arts were 10.8 per cent and 8.2 per cent.

² The date of the last previous revision of the curriculum.

³ The "dropped" students in state tables refer only to those leaving before the end of the quarter—an insignificant number compared to those who leave at the end of the term without completing the curriculum.

PERCENTAGES OF FAILURE¹ AMONG 313 GRADUATES OF HARRIS TEACHERS COLLEGE, 1910-13

English	22.4
Arithmetic	16.9
Science	8.9
History	7.3
Penmanship	6.7
Geography	6.4
Music	6.4
Drawing	5.1
Psychology	3.2
Primary	2.2
Reading	1.6
Hygiene	.9
Observation, Upper Grades	.3
History of Education	.3
Child Psychology	.3
Physical Training	.3
All Subjects ²	6.5

purely academic nature. In the state tables, "teaching courses" in these subjects are included among the "professional courses" which average together but one and eight-tenths per cent of failure.

It is almost impossible to realize the situation in the state schools without scanning the actual class lists. Thus at Kirksville, where the proportion of failures in professional subjects is lowest (one per cent), out of two hundred ninety registrations in the fall term there was only one failure (practice teaching). In the winter there were three hundred thirty-five registrations and ten failures, eight of them in classes taught by academic instructors and involving subject-matter such as teaching of history and teaching of arithmetic. In the spring there were three hundred forty-six registrations and six failures, three in practice teaching and two in the teaching of history. In the summer nine hundred twenty-four enrolments were recorded in the professional department, and one solitary individual failed to pass; this one was in a class in the teaching of arithmetic taught by an academic instructor. Elementary psychology enrolled one hundred forty-one students, including many fresh from high school and other new students from the country round seeking "approved grades" for their certificates, yet not one of this heterogeneous group failed to pass the course. The showing elsewhere is not much better. Is it surprising that teachers of academic subjects look askance on the department of "pedagogy"? What hope is there for a true perspective in teacher-preparing institutions, or indeed for popular respect for the study of education at all, when it figures thus in its own stronghold? Teachers of education at large are charged with undermining academic standards, and as long as instances such as these remain, they will have difficulty in disproving the charge.

¹ Failure at this school involves repeating the subject.

² Of the above subjects drawing, music, English, penmanship, and physical training occur in three terms; primary and science in two terms; and the remainder in one term each.

SEASONAL CHANGES IN STUDENT FAILURE

The seasonal effect upon passing grades at the normal schools is interesting and very marked.¹ Warrensburg maintains the most consistent record throughout the year; but all except Cape Girardeau reach a minimum of failures in the summer session—the session of largest, most varied, and least familiar enrolment. In its total showing, the record of failures for the remainder of the year is halved in the summer. Among collegiate students the proportion ranges from 1.9 per cent at Warrensburg to .6 per cent at Kirksville.

RELATION OF EXAMINATIONS TO ELIMINATION

One is tempted to seek at least a partial explanation for the above conditions in the methods whereby student work is tested at the several institutions, but to carry out a completely satisfactory correlation, much more exact information would be necessary than is at present available. In such departments of instruction as are likely to control their work in the usual way, that is, by periodic “tests” and a final examination,² some two hundred fifty courses were described in detail by the teachers in the various schools. At Springfield, where the largest total elimination takes place, about two-thirds of the courses were reported to use tests and a final examination, having together an average weight of about one-third in the final estimate; over one-fourth used “tests” alone, and the remainder (five per cent) used neither. At Cape Girardeau four-fifths of the reported courses gave important weight to a final examination, while but one course dispensed with tests of any sort. Warrensburg reports half and Maryville all but one as using final examinations. Five per cent at Warrensburg and none at Maryville dispense with tests altogether. At Kirksville a different theory has prevailed. Examinations of all kinds have been officially taboo in favor of the practice whereby the class is expected to “break new ground on the last day.” As a result, over two-fifths of the classes reported from Kirksville take no form of examination. In one-third of them, however, the teachers confess to basing part of their estimate of attainment upon “tests,” while in one-fourth of the cases the teacher avows the use of a final examination as well. Now it is noteworthy that in the departments of English and of history, where the elimination is highest (eight and seven per cent), and which offset thereby an almost complete absence of failure elsewhere, nine out of fourteen classes report the use of final examinations, and three more the use of “tests;” only two follow the tradition of the school and give neither test nor examination. In science, on the other hand, with its two per cent of failures, seven out of eight classes go untested and none are examined. The science department at Cape Girardeau, with twice as many failures, uses tests and examinations in each of the sixteen classes reported. In professional subjects more than a third of the classes reported at Kirksville undergo neither tests nor final examinations; nearly half use tests alone, and the

¹ See page 435.

² The departments here considered were English, mathematics, history, foreign languages, science, and education.

elimination is less than one per cent. Elsewhere in these subjects every class reported is either "tested" or examined, over two-thirds receiving final examinations; and the elimination is two or three per cent. In spite of the difference in the use of examinations, however, the variation in elimination is so slight, and the absolute amount is so small in nearly every case, that the condition seems referable chiefly to some more fundamental cause.

WHY THE NORMAL SCHOOLS ARE NON-SELECTIVE

It is probable that a variety of reasons contribute to make the Missouri state normal schools the non-selective institutions they are. In the first place they are not required to be otherwise. The great demand for teachers resulting from general propaganda, from state aids, and from local salary regulations favoring teachers with special preparation, enables the normal school to place virtually its entire product without difficulty and regardless of quality. The exceedingly varied and elastic scale of requirements in the different communities favors this, as does the financial condition of the students themselves, most of whom are glad to take what they can get. This is a different condition from that confronting the Harris Teachers College. Its field of demand is strictly limited and of uniform quality. When it raised its entrance requirements in 1912, it was expressly seeking a means to forestall an over-production of teachers, and it was obliged either to stiffen its admission requirements or to lengthen the curriculum to three years.

This lack of a compelling environment is nevertheless only the opportunity for the existing condition and not by any means its cause. The normal schools, as at present conducted, do not desire to be selective institutions. Their tradition is to "do something for the needy student who is struggling for an education," and not to select and prepare fit agents for public service. It has been to their interest to welcome and retain as long as possible every applicant, strong or weak; large enrolments, the spectacle of doing everything for the community, and "harmony" at all hazards have been the real objectives. Such aims do not accord with a selective function or permit of it. It is obvious from its table of failures alone that the Harris Teachers College is endeavoring to use its diploma in a discriminating way to guarantee the city of St. Louis superior teachers, and it is just as obvious that the state schools are almost completely indifferent to the way in which they mark their product.

This attitude on the part of the state normal schools is needless and injurious, and ought to be changed. State support and control in professional education ought to imply a guarantee of good and trustworthy standards consistently enforced. The state's brand on a teacher should mark a properly selected and thoroughly prepared and tested instructor, fit to teach in the finest schools of the state. As it is, the best developed school systems avoid the state's label and are compelled to ask for state funds with which to prepare teachers of their own. It is doubtful whether a change can be brought about in this respect except under a centralized system, where the

competition for size ceases to dominate each move, and where a uniformly stable and effective educational policy can be formulated and enforced.

LACK OF THOROUGH EXAMINATIONS A SOURCE OF WEAKNESS

Further, those who have studied the schools for the purpose of the present report are convinced that the system of instruction unaccompanied by examinations as followed in Missouri, particularly at Kirksville, is a source of weakness rather than strength. The purpose of a final examination in a subject is to ensure on the part of the student not only the opportunity for a comprehensive review and thorough organization of the material, but the actual accomplishment of those ends. An examination has further significance as a moral tonic of no slight value; the persistence and self-control required in preparation, the prolonged concentration of attention, the need of meeting adequately an important intellectual challenge—all of these are situations that recur again and again in life. It is especially proper that the professional servants of the public should be tested repeatedly in this manner. Education for its own sake may seek to avoid difficulties, but the public has the right to expect that professional preparation for its service shall make its teachers certain of their ground, shall sift out the weak, and shall give tone and masterful quality to strong minds. So far as could be observed, examinations were omitted, to quote Kirksville's admission, because they were "embarrassing" and uncomfortable, and for that reason only. Like selection of any sort, they involve distinctions which are disagreeable, but which, in some form, no respectable institution can shirk. All would prefer, of course, a series of comprehensive and reliable objective tests. Lacking these, a fair and thorough examination has advantages for such purposes that far outweigh any other plan hitherto devised.

Examinations entail certain abuses, such as excessive "cramming," worry, nervous tension, and so forth, which proper regulations for admission and preparation can largely prevent. The chief abuse in their present application in American schools is much more fundamental. Given immediately at the end of a term, semester, or year's course in a subject, their tendency is (1) to magnify details or systematic arrangements of material to be acquired *memoriter* for the purpose, without ensuring a just perspective for lasting use, and (2) once over, to supply the student with an irrevocable license to forget completely the matter thus handled. As a consequence, the student continually fails to review the field at such distance as to allow its large and really important features to stand out in clear relief and to take their places in relation to other studies as a permanent possession. It would be of particular value if students in a limited professional field, in addition to periodic tests during the course itself, could be held responsible for a general examination at the end of the curriculum covering the essential features of all their courses in relation to one another. They would thus have a constant stimulus to careful, discriminating thought relieved of non-essentials, and would acquire for their efforts an organized possession

of the whole much more likely to be permanent than the scattered, unrelated impressions with which they now leave school. Where this method has been introduced, as recently in examinations for the universities in England, at Teachers College, New York, and at Harvard University, it has been uniformly successful.

7. Administration of Credit

The recognition and assignment of credit is a vital matter in school administrative procedure. It defines the educational standards of an institution and assumes to measure by them the attainment of the student. This process is important in any educational organization. In a public vocational institution it acquires singular prominence because of the constant pressure to convert studious effort into capital for bread-winning; in a normal school there is superadded the subtle significance of the interpretation of credit as a factor in the creation of true ideals in young teachers. The discrimination with which credit is given for quantity and quality of student work is therefore a critical measure of the extent to which an institution discharges its educational as well as its administrative responsibility. Moreover, as a balance-wheel for steadying or, when erratic, for disturbing the movement of a school's internal affairs, the administration of credit is of exceptional importance.

No exhaustive examination of procedure in granting credit was made in this enquiry; the purpose was rather to secure sufficient familiarity with the current practice to enable a trustworthy judgment to be formed. The conditions in each school were carefully studied, and their development and tendencies were noted by tracing back the careers of recent graduates. Conferences with school officers, with teachers, and with many students served to throw light on the matter. Inasmuch as the situation differs materially at each institution, it will be necessary to describe them severally. The extended space given to the first is due to the fact that complete records were available as was not elsewhere the case, except at Maryville. Furthermore, at Kirksville the situation appeared, even on the first cursory examination, to be at the same time so remarkable and so typical of a certain order of procedure, that further study and a full description seemed advisable.

ADMINISTRATION OF CREDIT AT KIRKSVILLE

It should be recalled that shortly after the beginning of the school's expansion about 1900, entrance examinations were abolished, and there was introduced the "proving-up" policy without reference to the credentials presented.¹ At the same time a movement was begun to raise the standard of the institution. Instead of accomplishing this by fully matured and well-organized changes kept stable for a period and required of new students, or of all students after a certain date, partial changes in requirement were announced each year. Of the fifteen years, 1900-14, only three are without substantial

¹ See page 310.

alteration in the requirements for graduation. For a guide thru this maze of shifting demands the bewildered student, coming up to the normal school usually in alternate years, or even less often, was of necessity thrown back upon the graduating officer, in this case the head of the institution, who alone could say how much was still required to ensure a diploma. Thus each and every curriculum became, as to length, a personal arrangement between the student and this officer, and the demands were likely to change from year to year unless a written agreement were entered into. It is significant that descriptions, found at the school, of this standard-raising process, class by class, refer to the *average* number of hours presented by the graduates; that is, few, if any, two curricula were identical in amount; a maximum scale of requirements appeared in the catalogue, but the actual performance of a given student might be anywhere within a considerable range below.

THE THEORY

The theory corresponding to this practice is clearly enunciated: the normal school proposes to "treat each student on his merits" irrespective of any formal or "mechanized" requirements whatever. The statements of policy in the catalogue of 1906¹ are typical of the entire period: "We have found it necessary to admit and classify each student chiefly upon his individual merits." "We purpose recognizing not only the merits of each secondary school, whether approved or unapproved by pseudo-inspection, but also the merits of each individual student as our teachers get acquainted with them." "This school will not attempt to announce in advance the exact time in which any student may receive a diploma." A genuine merit system of handling students has been the ideal of every sincere educational institution, and efforts to achieve it have resulted in various devices for obviating the partisan or too sympathetic judgment, for securing objective standards, impersonal requirements, and, above all, for dissociating recognition of student effort and merit from any consideration of the interests of the institution. Kirksville has sought a solution by precisely the opposite method: by concentrating the final award of credit in the hands of one individual, and he the head of the institution.² Such a policy appears on its face immeasurably more difficult to administer fairly than a system which renders this delicate matter as automatic as possible, and settles the individual problem in accordance with a well-considered principle, rather than by the arbitrary action of one person—least of all the person whose position might give color to the charge that student credit was liable to manipulation for institutional or personal ends.

¹ Pages 17-19.

² Up to the time of the beginning of this study the records at Kirksville were inaccessible to any one save the president and dean of the school and to the "registrar," who was essentially a confidential clerk. All final records of graduates were made out in the handwriting of the president.

THE PRACTICE

The success of the Kirksville plan must be judged by its results. Such as are here given are the outcome of a careful examination of a considerable number of records verified in most cases by the students themselves. They aim to show neither the average treatment of rank and file nor the wholly exceptional cases; they are believed to represent the deliberate policy of the school as favorable occasion may arise.

A true, complete, and intelligible record is, of course, essential to the successful administration of credit. The institution at Kirksville has given excellent attention to such records as it possesses; they are well housed and cared for, and have evidently been kept up with some pride. Credentials for admission or advanced standing, whether originals or copies, do not exist.¹ The student's permanent record presents an inscrutable collection of term grades, with nothing to disclose when any given grade was earned or who was responsible for its award; this may be learned only by going back thru the entire series of term lists during the period of the student's attendance. Many grades are not regularly reported in these lists, and are therefore lost for the enquirer; possible examination marks, made up conditions, and irregular credits of every sort are in general quite untraceable to their only legitimate sponsor—the teacher. Thus altho the educational accounts of each student balance perfectly, the different entries, indistinguishable on the record, are extremely diverse in their real nature. Some of the details are extraordinary.

CREDIT FOR ADMISSION

In pursuance of the school's avowed policy credit is accepted from every source without important discrimination. This and the fact that no credentials whatever are preserved make it possible to fill up the gaps that arise with credit references of little significance. "Rural high school" plays a prominent part: this may apparently mean anything from a book loaned by the rural school teacher to work of merit done under good conditions. It is always uninspected and unapproved work so far as any official body is concerned. Such credit may sometimes be tested at the school; instances of examination were found. It may be taken again in part at the school; in this case a single term of grammar, or arithmetic, or algebra, or history, tho barely passed, carries with it credit for the whole subject. This credit is inserted frequently in the form of grade letters, as tho the work of all terms had been regularly taken, thus making it impossible to judge the source of the credit except after tracing it back. Or the credit may simply be granted outright without more ado, usually on the plea that the student has "proved up" in other subjects. If necessary, both outside credit and resident work covering the same ground are counted in making up the required amount.

¹ A single line at the head of the main record sheet provides space for answers, as follows: "Graduate of," "Attended . . . yrs." The permanent record card consists of a triple column of subjects distinguished as of "High School Rank" and of "College Rank." After each subject is space for "Grades" and "No. units," or "Hours Credit." An exponent by the "grade" shows the term sequence, and a marginal space records when the student enrolled in the school and how long he attended.

SECONDARY CREDIT

Secondary work at the school is further abbreviated by allowing one unit's credit for two instead of three terms work, even when the grades are low. Thus a "good" and "passed" grade together repeatedly give one unit in grammar, history, and physical geography, even at the age of fifteen, and regularly in algebra two units are allowed for the work of four terms or one and one-third years. What can be characterized only as a habit appears almost invariably with credit awarded in English. The phrase is: "Other High School English, one unit," and it stands for nothing tangible that could be discovered. It was said sometimes to mean membership in literary societies, and credit for such work was, in fact, announced in the catalogue of 1907. According to the many teachers and students interrogated, however, the work done under this head has never been subjected to control or accounting. Where such reference could not apply, as in the case of those doing their secondary work elsewhere, the credit was unexplained. Another "habit" appears in the reckoning of secondary credits in mathematics. "We assume," it was stated, "that any one who completes solid geometry must have four units of credit in mathematics." On this comfortable assumption deficits in arithmetic or algebra are generously overlooked. Seven term grades (two and one-third years), consisting of four grades of "passed" and three of "good," actually count thus for four complete units. A convenient and economical practice with "older students" (from seventeen years on) is to enroll them at once in college subjects, and on the "passing" of these to infer what they probably would have done had they taken the related secondary subject; the credit so arrived at is then recorded. By this method a student taking a curriculum in history is required to cover the ground but once for all secondary (four units in one case) and college credit. Similarly a course in zoölogy may net a student collateral credit in "physiology and sanitation" required in the secondary course. A condition, or for that matter a failure, in the work of one term may apparently be made good by any passing grade in a subsequent and more advanced term's work. So three terms of arithmetic may read "failure," "passed," "good," and all be accepted for one unit. More often the failure is not counted for credit, but does not require repetition before promotion, the express catalogued regulation of the school to the contrary notwithstanding. In this way a third term of English literature may follow a second term failure after a first term graded "passed." Complete failure may still be made good on the word of a teacher's superintendent, as when four terms of arithmetic, two of which are failures and two "conditioned," are validated for one unit on the recommendation of a superintendent in a town where the student obtained a position.

Part of the situation shown above is clearly due to the nature of the subject-matter recognized in such courses as arithmetic, grammar, elementary United States history, and civics. These are not professionally organized studies that could profitably be required of every student in full; as explained elsewhere,¹ they are essentially eighth

¹ See pages 309, 310.

grade work somewhat intensified, and any young student who has done well in that grade and has taught a term or two can take them as it were by samples, if not by persuasion.¹ Such work should not be recognized for secondary credits; a good high school requires of its students new work, and normal school courses should do as much, even tho the basis of the subject be familiar.

COLLEGIATE CREDIT

The absence of dates with the records of grades earned obscures the fact that much of the work for which collegiate credit is claimed must have been very elementary. One of the recipients of the degree of A.B. in 1914 entered the school from the eighth grade as a child of thirteen, and in the following year (1904), when fourteen years old and still under the required age² for admission even to the secondary department, began to earn "college" credit, continuing to do so each term for the remainder of her course. Another from the same class entered at the same age, and during her first year was given "college" credit for a course in zoölogy. For eighteen of the thirty terms of this student's attendance, she earned "college" credit and secondary credit side by side. Not all records are so striking, but the average overlapping of secondary and collegiate work in the cases of the fifteen members of this class who did resident secondary work at all was eight terms, or two and two-thirds years; the least was one and two-thirds years. A better evidence of what the quality of these "college" courses must have been could hardly be forthcoming, whatever the exigencies of transition that may explain them.

All work in German and all work in Latin above the second year is rated as collegiate at Kirksville on the ground that similar beginning courses are found in good colleges, but regardless of the fact that such colleges require secondary substitutes that cannot be slighted. For students who slur over their secondary work this dignifies with collegiate labels three years of German and two years of Latin, which are in their cases essentially secondary studies, and enables the institution to that extent to magnify its "collegiate" department, while secondary courses correspondingly disappear—a much desired result.³ Considering this view of secondary work and the mixture of it with collegiate courses already referred to, it is not surprising to find early secondary courses drawn upon for college credit when needed. Thus elementary drawing and Roman history in a student's first year of attendance may be transferred and figure as "five semester hours." An unneeded credit in secondary arithmetic may appear as a college grade in the "teaching of arithmetic and algebra." A subject may be repeated and credit given both for the original work and the repetition.

¹ The key to the situation is well revealed in the remark of a graduate on one of the verification blanks: "My age, some experience, personality, and ability to talk kept me from having to do much of the so-called high school work at Kirksville."

² *Catalogue*, June, 1903, page 25.

³ This result appears likewise in the practice whereby "college" work is allowed to count in making up the secondary units; an institution may be nothing but a "college" in this way and yet have no difficulty in providing for its secondary students.

Informal credit without class attendance is frequent, especially in new departments such as agriculture. A farm boy receives one unit of elementary "agriculture" as recognition of his home experience; credit in "farm management," "farm supervision," and "farm architecture," to the extent of twelve and a half semester hours, for work on the local school farm; further, "bacteriology," "horticulture," "feeds and feeding," and "principles of breeding," to the amount of twelve and a half hours, for work done privately with an instructor; and finally, a grade of "good," identified rather significantly as "Play in Education," for coaching football and baseball. Five additional hours of college work were granted in this case for the "teaching of science" and for "agronomy," without discoverable equivalent.

The most prolific source of college credit is practice teaching. As the dispenser of credit is also the titular superintendent of the practice school, credit for this subject may be assigned by him without going thru the books of the director of the practice department. This credit is apparently of three kinds: first, *bona fide* practice credit for work done in the training school and regularly reported; second, credit allowed for all sorts of teaching "experience" outside, little of which is done under competent supervision, nor is an accurate estimate or report of it available. "Experience" has been expressly allowed some credit both at the university and at the other normal schools, but the Kirksville practice differs in that its credit for experience is regularly recorded in definite class grades for fictitious subjects indistinguishable from other local work and that it is excessive in amount. "On account of her good record as a teacher in the state," one student proved to have received seven and a half hours' credit described in the record as "principles of teaching," "psychology," and "rural school methods and observation;" this in addition to one year's credit for practice work, two terms of which were reported from the training school. Another student had done no regular practice teaching, but received ten hours' credit "for substituting at odd times for teachers who were sick." The third type of practice credit is apparently granted in pay for chores, educational or otherwise; thus labor on the school farm, in the laboratories, or service as desk attendant in the library is allowed credit under this head in partial payment, the remainder coming in cash. The so-called "teaching-scholars" have regularly been allowed teaching credit in addition to their remuneration even tho their work received no attention that could be termed supervision. When teaching credit is no longer considered allowable, credit is given for some definite course; for example, credit for a college course in "English literature" is awarded for teaching a secondary class in grammar.

Unusual merit is recognized in a yet more unusual manner. When other methods are exhausted, all academic requirement is waived and credit is presented outright. The beneficiary of the two years of practice-teaching credit referred to above shows a preponderance of excellent grades, tho no better than many others. Yet to complete her record to the requisite number, six and a quarter hours were added arbitrarily, altho carefully distributed among specific subjects. Another student, with a record

of thirty-five semester hours at Kirksville and thirty from another school, was granted the one-hundred-twenty-hour diploma and B.S. degree. Seventeen hours were allowed in stenography and typewriting, possibly for secretarial experience at the school, seven and a half for travel in Europe, and the remaining thirty are still unexplained after repeated enquiry; twelve specific courses are set down as usual, but no one of them appears actually to have been taken anywhere.

The pains to assemble specific data for this type of credit are not always taken. At least three degrees of a blanket character were granted in or about 1912. "We never could actually get his grades together but we knew the man" is the justification. Up to 1915 nine teachers at Kirksville had received the bachelor's degree irregularly. Eight of these were fully employed by the school at the time, and offered no residence work; one held some resident credit but was awarded the degree of A.B. in duplicate after taking it from a good college, and became in this vicarious fashion the second four-year graduate the school had acquired. Some of these degrees were given outright as complimentary; others make great show of evaluating earned credits: one of the latter includes, as more than a fifth of the total hours, experience in teaching in elementary schools. Similarly a renewal of certificate, which by the school's rule requires ten semester hours of additional study, may be had on enrolment and payment of the registration fee only.

Finally, in case the school becomes desperate for means whereby to graduate a student, one last resource avails—a conditional diploma. On the promise to return and make up a deficiency of from one semester hour to over half a year's work, or else to surrender the certificate or diploma, fifteen students in one class, twelve in another, and two in another received the signed documentary evidence of the completion of their course. The time limit set was usually one year, but this might be extended.

TIME REQUIRED FOR GRADUATION

The time element in graduation under the Kirksville system is an important factor in attracting students and in building up a "degree class." This process really began in 1910, when four took the degree.¹ Three of these were studied from the records: one presented six secondary units and two and one-third years² of attendance at Kirksville, making four years at most for an eight-year degree; another did all his work at Kirksville, putting the eight years into four and a half;³ and a third offered five units and five and one-third years of attendance, making six and a half years in all instead of eight. Of the six graduated in 1911, the two who were studied presented, one of them a year in a Missouri "high school" unlisted by the state department, a year in "private study," and four and two-thirds years of attendance; the other gradu-

¹ Two four-year bachelor's degrees had been granted before, one in 1907 and the other in 1908.

² The term "year" as used here and below means the customary school year of nine months or three normal school terms.

³ This record shows 22½ semester hours earned in a single summer term, which may partly explain the case.

ated from a then second class high school and attended at Kirksville three years. In 1910 the catalogue announced a "five-year teachers' college course" with graduation platforms at each annual stage and with the degree of bachelor of arts or science crowning the fifth year's work. The records of students receiving, on this curriculum, the diploma of an expressly "Four-year Teachers' College Course preceded by a four-year High School Course"¹ are interesting. One high school graduate receives it in three years; while a student who did all his work at Kirksville completed the requirements of eight years in five. A degree of A.B. which in 1912 was advertised to require five years above high school, or nine years, was taken by a student presenting six units obtained in a rural school, after four and one-third years, making a total of six years at best.

Conditions in 1914 were the same, altho the five-year degree had disappeared from the catalogue. A student was allowed eight units from a "high school" too weak to be listed by the state department, and was given his elementary certificate, requiring thirty semester hours, in two years, his professional college work beginning immediately after his entrance. Another, with two failures, seventeen "passed" marks, forty-seven grades of "good," and six grades of "excellent," received the sixty-hour diploma, and was within seven semester hours of the ninety-hour diploma—a seven-year curriculum—in five and one-third years. Of the A.B. and B.S. students, one starting with "passed" in grammar and "failed" in arithmetic reached his goal in five and two-thirds years, a saving of two and one-third years. Another took one year more in spite of a much better record, and yet another, with practically all "E's," covered the eight-year curriculum in five years plus two summer sessions of six weeks each at the university. These cases were by no means exceptional.²

The facts above related leave one divided between admiration for the ingenuity and good fortune that could devise and operate such a system for so long a time unexposed, and resentment at the fraud perpetrated on unwitting students who trusted the state for straightforward treatment. The direct loss to the state is not a small one. To those who do not care to undergo the humiliation of having their degrees heavily discounted at a good institution—an event of frequent occurrence—graduation at Kirksville is not only the end of a dwarfed curriculum, but an actual bar to further study. Given the plausible theory of "individual merits," and setting up one personally interested and irresponsible person to be the judge, the rest follows as a matter of course. We have here an excellent illustration of what a state institution, into which students are practically forced by legislation, may arrive at without provision for constant educational scrutiny and audit. Thanks to a sound-minded corps of teachers and

¹ *Catalogue*, June, 1912, pages 29 and 173.

² It was instructive to come upon a *résumé* of the careers of these graduates in 1914, compiled by the school authorities and published in the catalogue for 1915; likewise a similar analysis, for later graduates, in the report of the state superintendent for the same year. The columns there indicating the time spent in secondary and collegiate work seem to be replete with errors, unless the method of calculation be understood. This is simply to take the total amount of college and secondary credit assigned as here described, and divide it by a *standard* year's program, thirty hours or four units. The "time" there given bears no relation to time actually spent, altho the impression is conveyed that it does.

a keen student body, a material change was brought about just as this study began. By their joint action at a favorable moment, the administration of credit for graduation was transferred to a committee of the teachers, where it has since been confirmed by action of the regents.

ADMINISTRATION OF CREDIT AT WARRENSBURG

The examination and transcription of records at Warrensburg was halted by the fire which destroyed the school buildings on March 6, 1915. All the records of the school together with the two weeks' work done by members of the enquiry staff were lost. The general impressions gained thru this period, however, have been supplemented by study of such sample student careers as could be restored from records held by the students themselves.

The record system in use at Warrensburg was a clumsy bequest from a much earlier period and merited destruction. The entries were undated and hence impossible to trace except by reference to teachers' class lists. Each student's account appeared to be carefully balanced, and, so far as was discovered, the items meant what they said. The records at Warrensburg are in charge of an official and independent registrar, who follows a regular routine, as is the practice in good higher institutions. In accordance with rules agreed upon by the president and the faculty, credentials for admission, advanced standing, and graduation are administered in behalf of a faculty committee by the dean of the faculty, who is also the head of the department of education.

The main ground for confidence in the general procedure at Warrensburg was the impression derived from the examination of the admission credentials of about one-fourth of the enrolment of 1913-14 taken alphabetically and interrupted at this point by the disaster already referred to. As is customary at the other schools, Warrensburg admits and classifies students without having their credentials in hand.¹ When they become candidates for certificates and diplomas, however, official credentials are required, and are invariably retained and filed at the school. So far as the examination went (about five hundred cases), the credentials bore out the credit allowances in every particular. Credits from unapproved high schools were in general fairly discounted, and even approved schools were likewise occasionally penalized. The value of some credentials from colleges and schools in other states was difficult to estimate; but the effort to do the student substantial justice and at the same time to protect the school was evident. The worth of the credential once determined, the allowance was duly stated and entered on the permanent record; it apparently was not open to reinterpretation. In view of Warrensburg's experience, it is plain that Missouri schools of all sorts can be induced to certify their students if the matter is patiently and persistently followed up.

¹ It was possible at Warrensburg to compare the credentials finally submitted from the schools with the student's own claims on his advance information sheet. In very numerous instances the latter were in excess of the other, the occasionally the reverse was true. The desirability of having these credentials in hand *from the outset* seems obvious.

A dozen Warrensburg graduates of 1915 were found who could restore their records by means of their own grade cards. Seven received the sixty-hour diploma. Of these, five were graduates of first class high schools; one spent two years in such a school, and one spent a year in the Warrensburg training school. The years required to secure this six-year diploma were as follows: 6, $6\frac{2}{3}$, 6, $5\frac{2}{3}$, $6\frac{1}{3}$, 5, and $7\frac{2}{3}$. Excessive programs were permitted the five-year graduate; as many as eighteen credit-hours in one summer term, instead of ten. An extra year of high school work (first class) was credited to another as two terms of college work. Teaching experience was expressly allowed two and one-half hours in each of four cases. Three of the twelve took the ninety-hour or seven-year diploma. One of these was allowed seven units for two years in a third class high school (1906), and graduated in just five years more with ninety-five semester hours; another received nine and two-thirds units for three years in a second class high school (1905), and took four and one-third years more to graduate; the third had two years in the normal training school, and spent seven years longer in attendance. The remaining two students were graduates of a first class high school; one attended four and two-thirds years in addition for a special diploma in household arts (one hundred fourteen and one-half semester hours); the other took the degree of B.S. after five years of work subsequent to the high school. The latter student had one hundred sixty-six and one-quarter semester hours to her credit for the one hundred twenty needed; it should be said, however, that in four terms she was allowed to take fifteen hours of credit per term instead of the Warrensburg standard of ten hours, and twenty hours in each of two terms, all of this forced credit being allowed as "college" work.¹

All credits appearing as such in the above records were *bona fide* class credits as verified by the students. Secondary work, such as algebra and ancient history, is given credit only for the time actually spent in case the usual time is shortened. Some ambiguity was found in distinguishing between secondary and college credit; in such a subject as agriculture, part of the class take it as "secondary" and certain others by virtue of outside assignments have it reckoned as "college" work. No diplomas have ever been granted without formal attendance and class work.

The impression left by conditions at Warrensburg was that of a thoroughly sincere and forceful organization anxious to maintain sound principles, but hampered by a lack of clearly defined standards.

ADMINISTRATION OF CREDIT AT CAPE GIRARDEAU

At Cape Girardeau the office arrangements for handling student records were much the best of any that were met with at the normal schools. The main record sheet was nearly a model of what a school should aim to preserve for each of its students, and the other blanks in use indicated that the problem of student administration had been carefully studied. So far as the usual routine reports of credit were concerned, the

¹ This would involve a schedule of thirty and forty periods of recitation weekly.

system had obviously been kept up with perfect fidelity under the supervision of an efficient registrar. It was surprising, therefore, to find that the importance of an educational balance-sheet for each student had been quite overlooked. The settling of accounts for graduation had been entrusted to a committee that acted chiefly thru its chairman. It was the latter's custom each year to work out the account for each graduate on a special slip, which was destroyed after his graduation. The school has therefore no statement showing the exact terms on which its graduates have received its diplomas or certificates; many records are several, and some very many, hours in arrears of the stipulated requirements for the diplomas granted. Admission credentials likewise have had no systematic attention. Cases where credit for admission must have been offered showed no record of the fact, and in many cases even of the most recent graduates the admission credentials were missing. Under such circumstances any complete auditing of the books was, of course, impossible. As far as they go, the records are fully and frankly explanatory. Grades not earned by class work are clearly referred to their proper source: examination, correspondence, extension, or experience.¹

Peculiarities of credit handling at Cape Girardeau are as follows: Full credit is allowed for elementary subjects "proved up" by a term's work at the normal school. Fifty per cent extra is allowed on all secondary credit in mathematics except arithmetic. Collegiate credit is granted in foreign languages on the score of native ability in conversation. Credit is allowed from the local training school to the extent of nine and two-thirds units for two years of work. This with the speed permitted in the normal school comes perilously near being a three-year high school curriculum. Advanced standing with full credit is allowed without examination for work done at short-term, unapproved high schools even where the subjects are not "proved up" at the normal school. Credit is granted for experience in teaching to the extent of eight semester hours. Experience has also been used to justify the enrolment directly in college work of a student with but nine units of secondary credit, and on his securing good marks, the granting to him of sufficient units in elementary subjects which he had taught to make up his deficiency. High school credits in excess of those required for admission to college courses have been allowed two-thirds of their value in college credit.² Why this was done for the professional diploma and not for the degree of A.B., as is stated, is not clear. The overlapping of secondary and college work amounts on the average to about three terms or one year, which as a maximum is reasonable and conforms to the school's rule in the matter. Degrees have been granted to four persons while active members of the faculty.³ No conditional certificate or diploma has ever been issued.

The chief weakness in the credit policy at Cape Girardeau stands out clearly in the records themselves and has already been discussed.⁴ The normal credit allowance for

¹ The date and name of the instructor authorizing the irregular credit would be a desirable addition.

² This practice is now discontinued.

³ One of these did all of his work at the University of Michigan, and another did all of his advanced work at the Universities of Chicago and Missouri.

⁴ See pages 318-320.

a year's work is planned at four high school units or thirty semester hours;¹ yet this is exceeded in nearly half the cases.² The graduating schedule adopted early in 1914 reduced the requirements for the advanced diploma from seventy-six to sixty semester hours, or two full years of college work, in addition to a four-year high school course. Yet of the fifty-two graduates in 1914 whose records were examined, twenty-three showed from one to five terms less than six years of schooling. These curtailments were not made by outside study during vacations or otherwise and followed by examinations. They were the result in most cases of excessive programs permitted the student by an indulgent school; five and six studies appear frequently on the secondary programs, and the credited hours, normally fifteen per week, run from sixteen to twenty-four, often with the help of the fifteen and thirty per cent bonus peculiar to Cape Girardeau. The same thing substantially was true of the eight-year graduates. Up to 1914 thirty-six had taken degrees. Of the twenty-three records examined, ten had a clear score of full attendance, tho several, as already explained, were apparently deficient in hours; five or six appeared to have had credit from elsewhere of which there was no account, and the rest were lacking in attendance and hours for no reason that could be learned. The following case from the class of 1913 illustrates the possibilities. The student went nowhere else after leaving the elementary school, but received credit, partly with and partly without examination, for study at home. The normal school at Cape Girardeau was attended for three years of nine months each previous to 1906, and granted the degree of Bachelor of Pedagogy. In 1912 the student returned for three terms, nine months in all, and earned during this time more than fifty semester hours' credit, taking the degree of A.B. after but three years, at most, of collegiate work.

ADMINISTRATION OF CREDIT AT SPRINGFIELD

The school records at Springfield may be termed a "system" only by courtesy. No connection has been perceived between a lucid, complete, and accurate statement of a student's work and the "human element in instruction" on which the school has properly laid great stress. The permanent record is entered on a small card unsuited to the needs of the school and which, when filled out, is obscure as to dates, character, and amount of credit. Admission credit is provided for on the back, but in such form that each entry requires further explanation to be intelligible, and such explanation is nowhere available. Such as they are, the entries are only partially kept up; "remarks" do not enlighten. This card, the only card for the purpose, carries no balance-sheet of a student's work on which certificates or diplomas may be authorized, and contains no record of such issues. As at Cape Girardeau, the case of each candi-

¹ The bachelor's degree purporting to be equivalent to those given elsewhere for a four-year college course requires the regulation one hundred and twenty semester hours of college work.

² The fact that more do not exceed the standard does not appear to be the result of action by the school. Cape Girardeau has a very large number of students who are willing to take only a partial program. (See page 319.) Irregularity either way seems to be a matter of student fancy.

date for graduation is worked out on a separate slip and attached to the record; after graduation these are destroyed! Classification and program cards, the only complete record the school possesses of a given term's enrolment, are destroyed when the few drawers containing them are filled. Term grades are transferred to huge sheets, from which reports are taken; the sheets are then relegated in confusion to a high closet shelf and given no further attention. Credentials for advanced standing exist to some extent. One hundred and fifty graduates in 1914 were credited with advanced standing; for eighty-one of these, credentials were found. In general the records were not maintained with care or in good order, and they were inadequately housed.

The theory on which credit is assigned at Springfield is not unlike that prevailing at Kirksville, tho the applications have been far less extravagant and have shown steady improvement.¹ It is conceived to be the school's duty to recognize the worth of the individual apart from the display of that worth in work which the school guides and controls, hence the "experienced" teacher as "known" to school authorities has been allowed special advantages. In the early life of the school, graduates were accumulated in some numbers on this basis, apparently in order that the school might have friends, and even at present it seems to be considered too "rigid and mechanical" to exact a precisely supervised equivalent for each credit.

To serve the individual student has been Springfield's special motto from the outset, owing to her location in a mountain region where until recently schools were poorly developed. With this intent admission has been made as easy as possible. Work done at low grade, short-term high schools has been allowed full credit without examination, and in several cases considerable credit appears to have been given for common branches clearly of an elementary nature. "Proving up" is theoretically the method, but it has frequently amounted to classification in the most advanced subject in which the student could succeed, and a bold assumption of what might have gone before. For example, a student who had spent three years at a seven-month, unclassified high school comes into possession of his six-year diploma after one and two-thirds years' attendance at the normal school. Another, from a school approved long afterward for but four units, is graduated in just three years. Entrance examinations are not favored.

Once in, several things facilitate unusual progress. Springfield has demanded but forty secondary term credits,² thus neutralizing her recommendation that students attend the local high school by placing a penalty of eight term credits on such attendance. An extra credit slips in for high standing, one for debating, and one for membership in literary societies (said to be carefully supervised). The sympathetic attitude of teachers and authorities finds it hard to resist appeals for speed at a sacrifice of every possibility of good work. One graduate in 1912, who reports having done all of

¹ As at Kirksville, too, the administration of credit has been concentrated completely in the hands of the head of the institution. There is no registrar, and teachers assigned to different classes of graduates have no power to make decisions.

² The "term credit" is one-third of a secondary unit.

his work at Springfield, received his six-year diploma in three and two-thirds years with many seventies and eighties in his record. One term gave him credit in ten subjects. The actual programs of recent years are more carefully watched, but work done under the old conditions is counted in full for current diplomas. One is impressed here as in other schools with the indestructibility of "grades;" as Cape Girardeau somewhere advertises: "No credit is ever lost;" they appear, on the contrary, to bear compound interest thru this use of credits earned under totally unfit conditions in making up a collegiate curriculum of modern standard. A single case of a conditional certificate was found.

The confusion in the records makes it impossible in general to audit satisfactorily any single account. Still, some students, who came as high school graduates and have attended continuously without "experience" to offer, seem to present a fairly reliable score. Full attendance and hours have been required of these. Others with irregular secondary work and "experience" to capitalize are almost invariably short in account. The same is true of the four-year degree students, of whom there were nine in 1915 but none in 1914. Three of these were already college graduates, and two had considerable college credit elsewhere; the records of the rest are obscure, tho one has a nearly complete record of eight years' attendance at Springfield. Five four-year degrees are reported as having been taken by persons while members of the faculty, but none wholly without residence work. The official description of one of these illustrates the method pursued:

"Professor X was given credit for his high school work at . . . , some of it on his having taught there, and for some hours of study in the high school there. He did in our regular work here ten semester hours of credit. He was credited [from another normal school] with 22.50 semester hours of credit. He did what we call Extension work, credit made by studying with the professors in this school and taking examinations, 12.50 semester hours of credit. He was given credit on account of experience and examinations for state certificate to the amount of 75 semester hours of credit."¹

A rather pathetic indication of the sincerity underlying the situation above described was the concern shown, not that the records as a whole were meaningless, but that in successive cases it was impossible to *remember* what had been the justification for the diploma or certificate issued. Little as the actual practices here are to be defended, records better on their face have concealed worse conditions.

ADMINISTRATION OF CREDIT AT MARYVILLE

The school at Maryville during its first half-dozen years passed thru three administrations of varying aim and ability, and is but just completing its organization under a fourth. One is therefore agreeably surprised to find its record system intelli-

¹ The state certificate here referred to was secured at a time when persons having only the equivalent of a high school course secured them without difficulty by examination.

gible and fairly complete, owing perhaps to the continuous service of the present dean and registrar. A complicated and inadequate record card not unlike that used at Springfield is kept serviceable by careful administration. Dates and certain symbols provided make it possible to piece together a student's educational history that appears accurate. Even here the accounts are left unbalanced and occasionally show deficiencies, explanations of which should have been recorded at the time of graduation. The great majority of the graduates at Maryville have already graduated from high school or academy, and occasionally from college. Of these both attendance and hours are invariably sufficient. Others, however, who have held over from a previous régime at the normal school, have been passed thru on a considerably shortened program; eight, ten, or twelve units instead of fifteen being accepted for secondary work, and the attendance being correspondingly reduced.¹

In all but a very small proportion of the possible cases, credentials covering outside credit are on file, often in the original but usually in form of a copy—an unsatisfactory substitute. These credits from all manner of schools are listed in full on the permanent record, to be used if needed, but are nowhere decisively dealt with; they would appear to be continually open to reinterpretation. Theoretically they are there to be "proved up."

In administering credit earned at the school there seems to be some confusion as between secondary and collegiate work. Psychology, when a high school subject, is occasionally converted into college hours; at an earlier date other high school subjects also found their way over the line. One practice at Maryville should be noted as evidence of a commendable sincerity. To maintain the standard of the four-unit year, all unprepared subjects, such as music, drawing, spelling, penmanship, or physical training, tho required, have been offered without credit; this, too, at a time when all the other schools were granting credit for everything, and were thereby materially reducing the time needed to graduate. On the other hand, an order like the following displays at least a regrettable lack of appreciation of what credit should stand for: "Credit X. Y. with E [Excellent] in whatever subject she needs in the Department of . . . for a Diploma." This was signed by the head of the department. From what the enquirers learned of the school, any implication from this but that of carelessness would fail to do justice to the present spirit of the institution.

ESSENTIALS OF CREDIT ADMINISTRATION

After the foregoing *résumé* of existing practice it is scarcely necessary to set forth in detail the characteristics of a fitting policy of credit administration. By way of summary it may be said that any school, and particularly any state-supported institution, should maintain such a system of educational records that an intelligent out-

¹ This is commonly excused on the ground of maturity. In fact, however, the fourteen students who in 1914 were put thru on a short schedule averaged less than one year older than the twenty-seven students from high schools and academies who gave full attendance, 21.8—22.5. Four others who studied chiefly at Maryville but spent full time averaged 24½ years of age.

sider could read therefrom an accurate history of the work of each individual student without need for any further explanation whatever. If one form of accounting must suffer in such an institution, let it be the financial; the clear and honest discharge of the educational task is the school's sole reason for existence.¹

The definition of acceptable credit is of course the task and responsibility of each state system, or, if the school be so unfortunate as to be obliged to act independently, of each separate institution. It is believed that the following procedure, if fairly enforced, will lead to a sound and self-respecting administration of credit, and will furnish a satisfactory basis for comparison with other good institutions.

First: Credits for admission or advanced standing in secondary or collegiate work should be accepted only from such schools and in such subjects as are recommended by the state department of education. Credit from other institutions should be studied and finally determined in each instance by the state department itself for subsequent use in any of the schools of the state. All other credits except such as are earned thru regular class work at the school concerned should be assigned only after a fair and thorough examination covering each unit of work for which credit is proposed.

Second: All resident credit should be coördinated strictly with whatever time and credit unit may have been adopted as a standard. If four units per year or fifteen hours per week constitute the standard, credit in excess of that should be permitted only on a basis of proved excellence, and then only in such a limited number of cases as to keep the real standard valid.

Third: All local credit should involve full-time class work with an instructor; "informal" credit should not be granted. Failure to meet requirements should necessitate either a second examination or a repetition of the course; otherwise the succeeding course should not be undertaken. Credit should not be granted to persons while in the employ of the school except to recipients of scholarships for work for which they are not paid. Complimentary diplomas and honors or conditional certificates should not be issued.

Fourth: Acceptable credit should be redefined from time to time as occasion may require. Such definition should invariably be formulated by a body representing the several schools, or else by the whole body of faculty rank in the teaching staff of the institution, and not by the crediting officer alone. The administration of credit should

¹ The essential features of such a record are: *First:* Identification of all credit for entrance and advanced standing with full explanations of source, date, and circumstances, amount and limitations of credit allowed, together with original signed and dated credentials in support of such credit. *Second:* A clear record of all credit earned in the school, showing date, character, and amount, catalogue number of course, memoranda of changes, conditions, or examinations involved, with filed or recorded authorization of irregularities. *Third:* Similar descriptions of all further credit granted but not earned at the school, such as correspondence and extension credit, allowance for experience, private study, and so forth, when validated by examination. *Fourth:* A record of all certificates and diplomas issued, with balance-sheet stating the catalogue requirements followed and the manner in which these were met. Certain other facts as to teaching experience and personal history are desirable, but the above are absolutely indispensable. In their study of the records at the various schools the members of the enquiry staff made careful note of the various local conditions, and later drew up a form of record that seemed appropriate. This draft was prepared as a suggestion to Warrensburg in replacing the records destroyed there shortly before, and may be of use to any school of the same general type. Copies may be secured from the Foundation.

be in charge of an independent officer subject only to the direction of the faculty or faculty committee.

Underlying the above policy is the general principle, accepted by all good educational institutions, that institutional credit is assignable not merely for work done, but only for work done under certain guaranteed and verifiable conditions that meet general approval and are open to appropriate inspection. As a convenience to individuals, credit vouched for by other good institutions is accepted and the privilege of examination is extended, but the right to review the conditions under which work elsewhere is done, as well as to stipulate that examination may be taken only when adequate preparation is apparent, must invariably be exercised by the institution, or by its agent for the purpose, the state department of education.

8. Graduation, Certification, and Appointment

The normal school has certain duties in the matters of selecting, labeling, and placing its graduates that may be grouped together as a final feature of administration.

a. GRADUATION

Until quite recently the normal school has considered graduation from its complete curriculum as a matter of secondary consideration in the sum total of its efforts. The schools have been concerned chiefly with short courses for transient students, and as an inducement to these, have held out special recognition to be awarded at the end of each successive year. According to Joseph Baldwin's scheme at Kirksville, a youth of fourteen starting with "a good knowledge of Common School Arithmetic, Geography, Grammar, and U. S. History" and progressing with "three studies and two or three drills" daily in forty-minute recitations, became successively a Bachelor of Elementary Didactics, a Bachelor of Scientific Didactics, and a Bachelor of Arts and Philosophic Didactics, all within four years, not to mention a mastership awaiting him after two years' experience in teaching. Scholastic decoration could hardly be more lavishly provided. These degrees were actually awarded on an average of about ten a year in the case of the advanced degree, up to 1884, when there was substituted a single certificate at the end of the second year, and the degree of Bachelor of Scientific Didactics after the fourth. This degree, changed in 1902¹ to Bachelor of Pedagogy, was discontinued in 1914. Much the same changes occurred at the other schools and at approximately the same time. The degree of A.B. was first offered at Kirksville and Warrensburg in 1904, and at Cape Girardeau a year earlier. It was discontinued, except at Cape Girardeau, in 1916, when the conference agreement of the normal schools and the university recognized the degree of Bachelor of Science in Education as the common goal of the professional curriculum.

The allurements of degrees seems not to have affected greatly the proportion of grad-

¹ *Catalogue, Kirksville, 1902, page 23.*

uates. In 1875,¹ out of a total of seven hundred nine students at Kirksville, only seventy-two succeeded in finishing the work laid out in one or another of the last three years. The rest were in the first year or below, or attended for only a part of a year. So also in 1883-84, grammar, rhetoric, United States history, and beginning Latin enrolled enormous classes, while many advanced courses were not given at all. Arithmetic had one hundred sixty-seven students, while physics had only five, trigonometry two, and astronomy one. Few graduates could be culled from such an enrolment, and to all appearances the conditions were similar in the other schools.

From 1887 on, graduation from the normal school carried with it a state license to teach, previously secured only by special examination or by favor of the state superintendent on the strength of examinations by the school. This privilege does not appear to have had any immediate effect upon the number of graduates, which remained nearly the same until about 1900, when it increased rapidly with the mounting attendance.

The number of advanced graduates in proportion to the total attendance has steadily tho slowly increased from the outset. Comparing averages of five-year periods, the change is from about two per cent in 1875-80 to nearly seven per cent in 1909-14 and nearly nine per cent in 1915-16. A six-year school, such as the normal schools chiefly are, holding its students from the beginning and graduating classes of not less than two-thirds of their original size, would release about thirteen per cent of its attendance each year. It is interesting to discover that Warrensburg did still better in 1916, making a record (14.8) nearly twice as good as that of any other school. This would seem to indicate a steadier, more regular attendance, more students held thru the course, and fewer transients. This record is probably due also to the fact that the two-year course drawing students directly from high school is better developed at Warrensburg.

It is perhaps worth noting, that in its general policy of graduation the normal school of to-day is exactly repeating upon the collegiate level, its earlier experience upon the secondary level. It offers a distinct terminal recognition, not at the close of any particular curriculum, but at the end of each annual section of the four-year period; on three of these four occasions, it gives a "diploma." Its first two years are crowded, while the third and fourth are meagrely attended, as in earlier days.

b. CERTIFICATION OF GRADUATES

A plan for automatic certification by the normal schools was contained in the draft for the normal school legislation in 1870,² but was omitted in the act as passed, possibly out of deference to competing colleges. As stated above, certification by normal schools was provided for by law in 1887, and has been practised since. According to this law the graduates of the "four-year course" (the present sixty-hour curriculum) were to have an unlimited or life certificate; and the graduates of the "two-year

¹ *Catalogue, Kirksville, 1875*, pages 6, 7, 15.

² *Senate Journal, 1870*, pages 551, 552.

course"¹ were licensed for four years. The life of the latter certificate was reduced to two years in 1889. Renewal of the two-year license at present requires additional study at a normal school to an amount varying from ten to twenty semester hours according to the school.

PRESENT FORM OF CERTIFICATION INADEQUATE

The degrees and diplomas available at the normal schools are of little moment in comparison with the all-important question as to how the skill and learning there acquired for teaching are made available for the service of the people of the state, who pay the bills. It is a characteristic of teaching certificates in Missouri, from the lowest to the highest, that so far as the state is concerned, the possessor may teach in any school, and may teach any subject that he chooses. The virtue needed for this roving activity is exhausted, now in two years and now in five, but once a sixty-hour curriculum at a normal school is achieved, it lasts forever! The normal schools have sought to correct this absurdity by issuing their diplomas with "designated ability," in order that those who read may know at least part of the truth. But few school boards read diplomas, and still fewer would heed them without suitable legislation; as a result, persons with scarcely a vestige of proper qualification or even of schooling teach in elementary schools, while others, usually with more schooling but equally unqualified for their work, teach in high schools.²

CERTIFICATION SHOULD BE SPECIFIC

The remedy for this situation is simple and appeals to the reason and experience of educated communities the world over; it is to *see to it that only those are permitted to teach who are qualified to do the teaching that they undertake*. This was, of course, the intention when certification of teachers was first devised, and an examination was required of teachers in order to protect Missouri school children who were learning to read, write, and cipher. To do as well to-day is to require that teachers of the sixth grade possess the ability to teach children of that age in a fashion that is now considered satisfactory. At present each community or district in Missouri decides for itself what the value of a certificate is to be, and there is no point whatever in demanding the sort of certificate that the state now requires. Under such circumstances training schools have little inducement to prepare a student satisfactorily for any position; and a variety of purposes divides the interest and weakens the performance of each teacher. Missouri should terminate the confusion and contradiction of this situation, and secure for herself the real fruits of her fifty-year campaign for better teachers; any other course is wasteful and a wholly unnecessary injury to the children and youth of the state.

¹ Little by little thru adjustment to students coming from high schools this "course" has been advanced one year, and now requires but one year less work than does the old "four-year course" (the sixty-hour curriculum).

² The state superintendent has recently tried to better conditions by requiring specific preparation in teachers teaching in high schools that seek state classification.

To accomplish this change successfully, three steps are essential: first, the formulation and acceptance of reasonable qualifications for the specific teaching positions in the public school system; second, the provision of adequate facilities for giving teachers these qualifications; and third, the aforesaid requirement that each teacher shall teach only the subjects wherein he has had the requisite preparation. These are simple principles, and can be set forth clearly in law, but their execution is an intricate task with which no law should attempt to deal. During the period of administrative immaturity of its education department Missouri, like most other states, has sought precautions by writing into statute law minute specifications of all sorts. In the case of teachers certificates, the legislators have defined the procedure with elaborate detail, including the subjects for examination, apparently without realizing that whether an examination in "physics" means much or nothing depends wholly on the superintendent after all. It is the same with the rest of these administrative items embodied in law. The state can reasonably define its wishes in general terms; its best and only guarantee for satisfactory execution thereof is to ensure trained, competent, and permanent officers for the purpose. As pointed out elsewhere,¹ this assurance in Missouri requires a change in the constitution.

CERTIFICATES SHOULD ISSUE FROM ONE SOURCE

Assuming for the time being a well-organized state department with a permanent, trained executive, the best interests of the teachers of the state would require that all certificates of whatever character be issued from the state office. This admits of no doubt in so far as county certificates are concerned, and is already near fulfilment in Missouri.² Certificates for work done at institutions should be issued from the same source. Under the present arrangement a life certificate to teach in any school is available for white teachers from seven different directions—five normal schools, the university, or the state department of education. One normal school may have granted it for success in two years of work in lieu of study at the university; another for a partial curriculum looking toward some high school subject; another for a thorough preparation for teaching primary children; while the university confers it on a prospective school superintendent, and the state department offers it for a set of general examinations or for the completion of certain work in colleges, and yet all the recipients may be using the document as authority for teaching in the eighth grade. Such diverse values of the educational currency are bound to result from a divided authority of issue, and they confuse and weaken the teacher's position throughout the state. Teachers should be considered as officers of the state, and their credentials should logically proceed from the state's responsible educational representative in charge of the public schools.

¹ Pages 63 ff.

² The state superintendent determines the questions for all county examinations, and directs the reading of the papers in a large proportion of them.

This does not mean, however, that the normal schools and the university should exert no influence over the certification of their students. In those respects in which they are fitted to act, their influence should be paramount. The state superintendent, in his capacity of general inspector of public education, presumably knows the schools and the school communities of the state—what they need and what they can pay. He recommends and controls state school aids and permanent funds. He has a carefully planned policy for the gradual improvement of the schools—that is to say, chiefly, of the teachers. It is he, therefore, who can best know what teaching positions may be differentiated in certification, how extensive a curriculum the salary in each type of position will justify, whether the certificates should be temporary or permanent, and how much further preparation should be required for renewal. These are all administrative details to be determined not, indeed, at the caprice of one man, but as the slowly matured program of his office, publicly discussed, thoroughly understood, and changing from year to year as the conditions of the service alter the needs. It is a fundamental error to put them into statute.

THE INSTITUTIONS' SHARE IN CERTIFICATION

On the other hand, the institutions that prepare teachers are equipped with skilled instructors for that purpose. It is their business to agree upon and determine the nature of the work for which certificates to teach shall be granted. Within the limits of aim and time set by the state superintendent's office, they must decide what is the most advantageous preparation that in two years, if current salaries will warrant no more, will equip a sixth grade teacher, or in four years a primary supervisor, or in six years a school superintendent. School autonomy in this matter is plainly a blunder; the training schools of a state must work these questions out and move together, and for this purpose some centralized form of organization is indispensable.¹

The initiative and authority of the schools themselves in this process is an asset that should be retained at any cost. It would be easy to assign the power over such schools to the state office and thereby to turn the training institutions into factories and their directors into foremen, as has already been done in some states. The suggested organization of the normal schools as an integral part of the state university was intended to make this impossible. The dignity and power of the independent professional scholar should be as much a trait of the state's servant as of any private worker, and while in preparing teachers he serves a carefully controlled and measured need, he must be allowed to do it with the vitality and free responsibility of a genuine educator. This is already true of other professional branches and should be preëminently true of education.

¹ See Chapter IV.

NEED OF A UNIFIED ADMINISTRATION

It will at once be seen how this joint responsibility for developing and utilizing the state's teaching power would be facilitated by the unified administration already proposed. By that plan a single board of education is expected to operate thru its state superintendent for elementary and secondary schools, and thru its university chancellor for higher education, including the preparation of all teachers. The state law should make the board responsible simply for the registration and certification of the character, preparation, and proved skill of all teachers in the public schools. Under the board, the state superintendent, because of his knowledge of the field, should determine the number and kinds of position for which teachers shall be prepared and certified, the length of their training, the life and character of their credentials. Under the same board the university in turn, thru its group of presidents¹ in charge of the professional preparation of teachers, should determine the character of the curricula in every respect and supervise them, it should conduct all examinations, and should become responsible, in general, for the quality of the teacher's performance. The two departments under one board should be in constant and intimate contact and interaction, and would be dependent upon each other for ultimate success.

A plan of this character would make possible certain changes much needed in Missouri. Certainly no student fresh from the normal school should be given a life license to teach anywhere. Such a permit, if ever granted, should be issued only after a prolonged and thorough test under the scrutiny of careful supervisors of the candidate's ability in active service. Practice teaching at the schools, as at present conducted, gives a valuable but a very inadequate opportunity for this test, as Missouri superintendents well know. In addition to much better practice facilities at the normal schools, some form of the so-called "apprentice" system is needed. This would be very difficult to arrange under present conditions, but would be a simple matter under a single board of education controlling the certificate privileges. Such a board could take a suitable number of schools in the state, selecting them according to the qualifications of the superintendent and of one or two especially designated teachers. Here the normal school graduates could be required to spend a year in carefully supervised practice before receiving permits for independent work elsewhere. They would be paid, of course, a reasonable amount, and a bonus would go to the supervisors or to the school or to both for their service. The details could be worked out gradually; the point that it is desired to emphasize is that nothing of this kind is easily possible until a unified administration with complete powers takes hold of the problem; to attempt to legislate on a matter of this kind could have no good results.

c. APPOINTMENT OF GRADUATES

The final purpose of a normal school is fulfilled only as its fully prepared graduates are brought into effective relations with the state's youth in some permanent

¹ The state superintendent would presumably be an active voting member of this group. See page 57.

teaching position. Inasmuch as the success of this adjustment is likely to turn on the extent to which both teacher and position are clearly understood, an important responsibility devolves upon the school.

PRESENT METHOD OF RECOMMENDING TEACHERS

In Missouri this responsibility is actually much more lightly felt than might at first be supposed. Reference has already been made to the fact that the normal schools have never had serious difficulty in placing their students;¹ so great is the economic pressure that their chief concern is to keep students from taking positions before completing the curricula. Furthermore, the nature of the preparation offered reduces the problem of adjustment to a minimum. Both in theory and practice the training has been "general," with no particular position or set of conditions in view. Brief conferences with the superintendents in the twenty-five largest towns and cities of Missouri made it entirely clear that most of these men expected their teachers to receive their specific training after they engaged them. The normal schools had given them perhaps two years of general studies, had exercised little discrimination or selection in passing them thru,² and now turned them over to the superintendents to discover what sort of teaching each could best do. To send to a normal school for a trained and tested fourth or seventh grade teacher was not the custom; the superintendents said they would be glad to do so, but were skeptical of the ability of the schools to supply them.

Under these circumstances it is evident that the methods of the ordinary employment agency are sufficient: bring the parties together to determine certain items of appearance, personality, and address; make assurance of good character, intelligence, and industry, and if salary and location are satisfactory, the thing is done. In the case of high school teachers, the amount of study in certain departments may be considered, but this is not always indispensable. Neither from the normal school appointments committee nor from the superintendents themselves could it be discovered that the latter enquired into the record of the candidate in practice teaching, or felt that to be any criterion of future success.

DEMAND FOR TEACHERS NOT YET SPECIALIZED

It must be admitted that the normal school's vagueness of training and imperfect knowledge of the candidate are probably fully duplicated in the uncertainty on the part of many superintendents and board members as to the exact qualities needed. In the case of board members the situation is, of course, hopeless; such officials ought never to be in a position to choose a teacher. Superintendents, as members of the same craft, are likely to be fair judges of general characteristics, but the great majority of superintendents with whom the normal schools come in contact are without supervisory training and usually without genuine supervisory experience. They have been pro-

¹ See page 326.

² See pages 321 ff.

moted often without special study, and invariably without special examination or license, from teaching positions to their present places, where some teaching is still often expected of them in addition to conducting the school and handling the discipline, the parents, and the board. For such men the successful teacher is preëminently the best "tactician," as one normal school president expressed it,—the teacher who takes care of her own troubles, keeps harmony with the parents, and pleases the directors. It need hardly be said that these traits may and do frequently occur quite independently of the abilities necessary in a thoroughly informed and skilful classroom teacher, and until supervision is more highly refined than it is to-day, they will continue to be first in demand.

The conditions of employment above described actually fit a small proportion of the cases. For a superintendent to appear at the normal school in person and select his teachers is an advanced development; they usually write, and selection is then made between rival applicants locally, where school directors may add their discretion to suggestions of the superintendent. Sometimes the normal school is simply asked to "send over some one," who is forthwith accepted on faith. In all these cases the written recommendations of the school touching general qualities are of value as before, but the result in respect to specific abilities as a teacher tends to become still more of a lottery than ever.

The machinery for placing students is in general the same at the different schools. An appointments committee, including or perhaps headed by a member of the training department, has charge of applications and recommendations. A blank filled out by the student, as in teachers' agencies, is the chief feature of the plan. So far as could be learned, judgments and suggestions are made, except at Warrensburg, on a wholly informal basis, sometimes by a single member, sometimes by a consensus of several teachers, but without any carefully defined method or technique. In some cases no stenographer or assistant was furnished the officer doing the work, and the latter was obliged to spend many hours each week laboriously handling the correspondence besides doing full work in the classroom. The organization of the data seemed to be most complete and systematic at Warrensburg, where filed confidential statements from various teachers as to the candidate's special characteristics and abilities were kept available for immediate reference. Here, also, an attempt was made to secure from superintendents in the district an annual rating of the normal school graduates, but no important use had apparently been made of the returns.

IMPROVEMENTS NEEDED IN SYSTEM OF APPOINTMENTS

There is no doubt that the present system of student recommendation and appointment from the normal schools could be greatly improved. At present it is largely a hit-or-miss process, well meant and helpful as far as it goes, but proceeding upon too few data, indifferently organized, and regarded as incidental rather than as a fundamentally important aspect of the school's work. In a strictly professional school there

is every reason why each instructor should consider a student primarily as a prospective teacher, and should contribute in a simple but definite form, his judgment as to that student's qualifications for teaching. To form such judgments intelligently is one of the chief things that the state should expect of a normal school teacher, and a major reason why he should be educated for the purpose and chosen with care. His work is not completely finished until the training given is successfully operative with children, and he should contribute thereto by recognizing and assisting in a proper disposition of his students' abilities. To be sure, the lack of competent supervision and the blindness of employers to essential conditions of good service are difficult to combat, but a highly organized normal school can have enormous effect in opening the eyes of board members, and in disciplining careless superintendents. A clear knowledge of a teacher's real qualities, personal visitation and study of her position and surroundings, if necessary, and a determination to bring bad conditions and ignorant or unprofessional treatment frankly and publicly to light in her defence, are simply routine duties on the part of a normal school that rises fully to its opportunity. For the normal school is the chief and usually the only professional critic, counselor, and inspirer in its entire district.

NORMAL SCHOOL RESPONSIBLE FOR TEACHERS IN SERVICE

No such agency can stand apart. The public schools are its real classrooms and laboratories. Its hold upon the teachers, and its power to do favors by sending good speakers to the various communities and by giving sound expert advice, enable it to exert a large and beneficent influence that is all the greater because it is informal and unofficial. "Local conditions" are but concrete professional problems to be steadily analyzed and solved. The normal school should be the unremitting educational leader at these points, assuming a tactful initiative for the sake of its students, where low standards or opposition prevail. Such service demands the attention of the most skilful and experienced persons that the school can command. The proposal has been made elsewhere¹ for prolonged visits or exchanges on the part of normal school teachers in schools of the district, and the further suggestion was made of a special officer on each staff with field duties of a purely educational nature.² The scheme for apprenticeship alluded to in the foregoing section would contribute greatly to bringing the normal school and the schools in the surrounding region together. With such contacts fully established, the conditions and problems of each school in the district would be clearly understood and intelligently provided for at the normal school, thus completing the natural circuit of the institution's activity, and binding the several communities to its support. It would be better in the end, certainly, for a given normal school to develop fruitful relations such as these with the schools dependent wholly upon it for guidance, than to use up its funds on a program of internal expansion merely to meet the competition of other normal schools or to impress the public.

¹ See page 282.

² See page 255.

9. *The Quality of Normal School Administration as an Element in the Normal School Curriculum*

It would be easy and proper to criticise the conduct of the Missouri normal school from a purely practical point of view, and to show that, while doing commendable work in many respects, several of them have failed to apply well-known principles of good business management to their educational proceedings. But the more significant aspect of the matter lies much deeper. Public education in which the students trained in these schools will participate as teachers is largely a product of institutions organized in all essential respects on forms closely parallel to these normal schools; relations between teachers and pupils, studies, recitations, and credit are all fundamentally the same in elementary schools, high schools, and normal schools. Nothing is more certain, therefore, than that the institutional treatment to which these prospective teachers are subjected during their preparation will reproduce itself with unerring fidelity in the schools which they control later. Just as the young teacher's teaching equipment is borrowed largely outright from his own favorite teachers, so his notions of management, his ideals of values, his conceptions of intellectual honesty and right are framed not half so much by the texts he studies as by the experience that actually shapes his own progress. What chance with him has a book's paragraph on school ethics against a teacher or president who out of sympathy, laziness, or self-interest gives him credit for two-thirds of a course that he has not taken? A plea on the score of "experience" brings in added grades, the desire of the school for another "A. B." remits still further obligation, and the downfall in that student's educational *morale* is complete; education for him, whether as high school teacher or as superintendent, henceforth means juggling of just that sort. Or possibly he is so fortunate as to go later to another and different school that imparts a bit of experience in its avowed ideals with every student contact and requirement. Then comes disillusion as to his earlier training. If presidents, whose judgment has overshot the mark of "justice to the individual merits" of their students, could hear what their enlightened graduates later say and write of these honors for which they have bartered, they would lose faith in their ability alone to apply that principle. One does not deride a reward justly deserved.

Less fundamental but exactly similar is the effect of the whole machinery of administration. Classes with wide extremes of age, attainment, and experience represent a thoroughly bad example of classification. For this reason, if for no other, a training school should refuse to tolerate situations that may soon come to be considered by the students as normal. Overloading, lack of sequence in courses, lack of coherence in curricula, all react inevitably on the student's general ideal and feeling for good educational practice. An inadequate record system and its slovenly administration¹ or the unbusinesslike making and shifting of schedules at the beginning of

¹ In going thru normal school credentials at the university there was discovered a set of three statements of a student's work covering the same period: one by the student from his credit cards and two by the president of the

a term is a constant model of confusion, and proclaims an institutional dulness that ought not to exist. Even in a trade school all these things are important because of their immediate effect, but in a normal school they are vital because they are so inevitably and widely circulated as ideals that are educationally correct or tolerable. Properly valued, such elements are quite as essential features of the curriculum as the formal courses themselves, and should be given quite as careful attention.

As a result of failure to perceive these points, it must be admitted frankly that the work of the schools as a whole impresses the candid observer with a pervasive "softness." By the tradition bred partly of political dependence they have sought to make rosy the path of the individual student instead of centring their thought on training him vigorously for the service of the state. When nothing is *required* for admission, when thorough examinations and tests are heavily discounted, when almost no one fails to pass, when a school must say "*it is hoped* that no student will so mix his courses that there will be more than two years (!) difference between any of the courses that he takes;" when it gives a student his diploma, but warns him not to present it at other institutions because they will not honor it; when, believing in the rule, it is unable to insist that men and women students should not room in the same house, and when it lets its meagre fees run indefinitely for fear of entailing hardship—the outcome must be a degree of spinelessness ill associated with rational discipline for *teachers* of American youth.¹ Strong and virile teachers arise, if at all, in spite of such an atmosphere; certainly not because of it.

10. *Recent Changes in the Institutions*

It has been the aim of the foregoing sections to consider certain features of normal school administration on the basis of the text provided by the Missouri schools when the study began in 1914. Since that time certain very marked changes have taken place without, however, impairing the validity of the original text for the present purpose, namely, an analysis for general use of the problems of this type of higher institution as presented currently by a typical state. Nevertheless, in justice to the institutions these changes should receive more than passing notice.

It should be said at once that no one of the modifications that has occurred has resulted directly from official recommendations arising from this study. When desired, the members of the enquiry staff discussed their observations freely with the teachers and authorities, but only so. On the other hand, it would be remarkable if these

normal school, and all materially different! At the schools it was a common experience to have the president and dean, or committee-man, arrive at quite different results in interpreting the same record.

¹ An interesting illustration of this temper occurred in collecting data for the present study. It was desired to hear from every teacher and every student. Responses from the teachers were finally secured with few exceptions after correspondence lasting over two years, but the student data were never completely gathered. At three of the schools it was necessary to go thru the whole process of printing, distributing, and collecting student cards twice in order to get a good proportion. At the state university, on the other hand, the request was made once and every student card was in hand within a week, and a card from every instructor within three weeks, both collected by the institution itself without further mention of the matter.

informal discussions, the careful gathering of particular kinds of data, and the emphasis upon certain difficult problems, had no effect in hastening changes for which the institutions had long been ripe. The most notable of these is the voluntary coördination of all the institutions, including the university and state department, in the administrative agreement described elsewhere.¹ Upon the basis of certain mutually accepted standards of work the interchange of credit is established, the normal schools and the university thus healing a breach of long standing. These standards concern chiefly the training and program of teachers, the admission, classification, and program of students, the differentiation of secondary and collegiate work, as well as of elementary and advanced collegiate work. They are without exception in the direction of progress from earlier conditions, and may signify an epoch-making change in the conduct of the schools. How completely these new standards are now enforced, and with what result, it would be impossible to say without reexamining the schools, but general indications are exceedingly favorable. In the matter of records, too, Kirksville, Warrensburg, Springfield, and Maryville have undergone extensive transformation, utilizing the results of experience drawn from the enquiry. Cape Girardeau already had an excellent system which it had only partially utilized.

The tone of a critical study may be of so gray a cast as unfairly to obscure great merits which exist and in fact predominate. The danger in this case would perhaps not have been so great, had not the schools of their own motion challenged technical comparisons which they were at many points quite unprepared to meet. However, the essential soundness of these schools and their great service to the state can scarcely be exaggerated. The school at Kirksville represents a precious original tradition of courage and progress in education. It has on its faculty an exceptionally large number of gifted teachers—a fact for which its leader is as completely responsible as for its gross defects. One could admire the reckless vigor with which the school has so persistently courted expansion, had the methods used been more scrupulous. From an administrative point of view its practices should be overhauled. Warrensburg, of the three original schools, has clung most consistently to its task, the making of teachers—an attitude moulded and fixed by its clear-sighted president for a quarter of a century, George L. Osborne. Its inward spirit and organization have placed it more nearly than the others upon a level of true collegiate performance, tho this fact has not been unattended by difficulties that might be less apparent under a more autocratic system. The efforts of the school at Cape Girardeau have been expended upon a more difficult region than surrounds the first two schools, a region that is much more rural and detached, and where, as at Springfield, there must be endless accommodation to the individual. This aim has led both schools astray at certain points. Cape Girardeau has, however, done its work with much devotion and with skill, as the high rating of the practice school reveals. The institution breathes the dignity and refinement of its beautiful buildings, and tho there is a touch of

¹ See page 61.

pompousness in maintaining for years a "college department" with few or no one in it, the vacant curriculum has at least been a symbol of aspiration. Springfield in a dozen remarkable years has developed a reservoir of fine educational ability hitherto almost untouched and of priceless value to the state. The zeal and self-sacrificing dedication to needy youth exhibited by certain members of this faculty are beyond praise, tho this trait is not by any means confined to Springfield. The achievement of the practice school in the place it holds in the larger institution and in the quality of its product deserves special commendation. Owing to various vicissitudes the school at Maryville has but recently found its true pace. With an equal chance it should match the other schools, tho one cannot but regret that this school, with its choices till recently still before it, should have set itself merely to duplicate the others, rather than to try what intensive labor on a clear, restricted, well-planned program would do.

IX

PRODUCT OF THE NORMAL SCHOOL

It is difficult to devise a definition of the "product" of the normal school in Missouri. Among teachers now in service attendance at a normal school varies from one to twenty-five terms. The name "graduate" has usually been reserved for those who completed the old four-year curriculum—at first a purely secondary curriculum, but since 1900 gradually approaching the equivalent of two years of collegiate work. On either side of that point, however, certificates or diplomas have been granted, if desired, at the end of each year, giving the student a worse or a better right to use the term "graduate" as his interests might dictate. If those completing the two-year collegiate or "sixty-hour" curriculum be counted as standard graduates, the schools together show thirty-seven per cent of this grade or above during the past fourteen years. Warrensburg leads the list with a total of forty-four per cent, and a recent production of over one-half.

The more important question is not how many have been in or thru the normal school, but rather, what is the nature and extent of the contribution made by normal schools to the improvement of instruction in the public schools of Missouri. This question has been approached from two points of view: one, an examination of the destination and performance of the groups of graduates as they leave the schools, and the other, a study of the product of the schools as it exists in the teaching population of the state. The first is necessarily partial, and because of defective records, is limited to small tho representative numbers; the second supplements the first with a cross-section of the entire service for which the schools prepare.

A. NORMAL SCHOOL GRADUATES OF 1915

Of students leaving the Missouri normal schools¹ in 1915 with diplomas and certificates of various grades and expecting to teach, over one-third went into the same county or adjoining counties, and another third into other counties in the district. Seven per cent left the state; these were chiefly from the two-year group, of which they numbered fourteen per cent, and from the three-year group, nine per cent. It is surprising to see how closely the four-year graduates clung to the vicinity: aside from seventeen per cent employed immediately by the normal schools, nearly two-fifths taught in the same or the next county, outdoing all but the rural certificate teachers in this respect, and giving further evidence of the largely local appeal made by these advanced curricula.

If all the students sent out be grouped by occupation, the disposition of the various classes of graduates becomes highly significant.² It seems that over one-third of

¹ The information from Maryville was too fragmentary to be of use.

² See table, page 438.

them go into rural schools — probably an understatement of the fact, for the deficient records are chiefly in the low grades that swell this group and the next. This should receive passing emphasis, for many normal schools, those of Missouri included, have been much criticised for not attending to the rural school problem. A record of one-third of the students receiving certificates sent into rural schools would not be a bad showing if it could be said that these teachers were prepared expressly for their work, and were not *en route* to other positions in preparation for which the rural schools are furnishing the funds. Graded schools take at least forty-four per cent, and probably would be shown to take nearer one-half, if the records were complete. Those who teach in high schools number one-sixth of the total. As high school teachers are almost invariably known and reported, this is undoubtedly a maximum proportion.

The returns are full of peculiar revelations. With the exception of rural school teaching, all grades of instruction are represented in each of the collegiate graduating groups. One-sixth of the rural certificate graduates (secondary) have crept into graded schools, while almost three-fifths of the collegiate one-year students are so located. Less than two-fifths of those teachers who go into graded elementary schools are equipped with the minimum two-year collegiate training for that service. The high school situation is especially interesting: over two-thirds of the normal school “graduates” in high schools have had but one or two years of collegiate preparation. The administrative group is equally deficient: only one-sixth of the forty-two so-called “superintendents”¹ possess the equivalent of a college education. The “thirty-hour” or one-year collegiate class boasts eleven high school principals and seventeen elementary school principals. These high school officials, to be sure, are chiefly teachers, and are in third class or unclassified high schools. Nevertheless, they aspire to offer a year or two of secondary work and to pose as heads of schools, while possessing but half the professional training of good elementary teachers. The grades into which normal school graduates go were indicated in nearly three-fourths of the cases and show an almost equal distribution. This was to be expected in such a group from the fact that the majority of them are already experienced teachers and have left the intermediate grades where they began their work. About fifty-two per cent were teaching more than one grade.

A more minute analysis of the high school group shows that if we ignore the small number — ten per cent — that leave the state to teach in high schools elsewhere, the remainder are divided almost equally between first class high schools and others. The former deserve particular attention. One-sixth of the number have a standard preparation of four years, but nearly as many — fourteen per cent — have had but one year of collegiate work. It is hard to believe that fifty-eight per cent of all the teachers sent into first class four-year high schools from the normal schools in 1915 had but one or two years of collegiate training — an average of less than is to-day required in a first class elementary school teacher.

¹ The titles used are those current at the schools for the positions in question and not the choice of the candidates.

As the "principals" and others giving no record as to what subjects they were teaching were nearly all in third class or unclassified high schools, it may be assumed that they taught more than one subject. On this basis sixteen per cent only of the total number of graduates teaching in high school taught one subject alone, and rather oddly about the same proportion holds for the graduates of each curriculum except the four-year group, of whom twenty-two per cent taught one subject only. The combinations of subjects taught in the classified high schools in 1917 are listed in the Appendix.¹ As a large proportion of teachers there listed in single subjects are in St. Louis and Kansas City, the duty of the normal schools to give those who are to teach in high schools a good preparation in at least two subjects would seem apparent.

RELATION OF SALARIES TO TRAINING

To complete this brief description of the normal school graduates during the year in question, account should be taken of the salaries attached to the positions to which they go. In the absence of a complete record the tendency is probably to rate salaries too high, for the good fortune of well-paid graduates is better news at a school than the low or average wage of the less successful. Reports were secured from 1022 of the 1225 graduates known to be teaching. The schedule of their incomes shows the consistent effect of training on salary; the median monthly salaries thru the successive curricula are: rural certificate, men \$50, women \$50; one-year collegiate, men \$70, women \$50; two-year, men \$75, women \$55; three-year, men \$85, women \$60; four-year, men \$105, women \$65. This last group is comparable with the university group at the same stage, in which the median salary for men rises to \$118 and for women to \$71.²

Rearranging the data on the basis of the kind of positions taken, the following result is secured:

	Men			Women		
	Number	Median	General Median	Number	Median	General Median
Rural Schools	80	\$50	\$47	228	\$50	\$44
Graded Schools	53	65 }	64	396	50 }	50
Principals	22	75 }		9	75 }	
High Schools						
First Class	38	75	94	54	65	70
Second Class	6	95 ³ }	75	17	60 }	60
Third Class	13	85 ³ }		19	55 }	
Unclassified	15	75	75	10	63 ³	55

Comparison with the general median of salaries is not fully justified, as the normal

¹ See page 440.

² Median initial salaries of 60 men and 127 women graduating from the University of Missouri in 1913, 1914, and 1915.

³ Apparent inversions of the expected order are due to the fact that teachers in the lower class schools are more often principals as well.

school product is on the whole younger and less experienced. It is experienced to a considerable extent, nevertheless, and on that account cannot fairly be compared with the wholly untried teacher.

NORMAL SCHOOL STUDENTS AT THE UNIVERSITY

A certain number of normal school students go each year to study at other schools. No attempt was made to trace these students except at the University of Missouri, where they are most numerous, and where a convenient feature of the records made an estimate of their standing an easy matter. It is the custom to assign additional credit for work rated *A*,¹ and to subtract credit for work rated lower than *B*. In recording this gain or loss use is made of a credit index, which represents the proportion of total credit earned with reference to the normal credit hours of the courses taken. Thus a student rated *B* throughout would be indexed as normal, or 100, because his earned credit and the credit hours of his courses are identical.

In 1912-15, two hundred ninety-nine students who had previously attended Missouri normal schools were registered at the university. Of these, seven per cent showed the normal index — that is, had done average work rated *B* in all their courses. Thirty per cent were below and sixty-three per cent were above normal. The average of the entire group is almost exactly normal, showing that the quite good work of the majority was nearly offset by the very poor work of the minority. The median index, however, is 102.9, or nearly three points better than normal.

Nearly three-fifths of the number were men — a noteworthy fact, considering how largely women predominate in the normal schools, and further evidence of the motive underlying male attendance there. They show a median of 102.1 as compared with 104.9 among the women. Two-thirds of them had graduated at the normal school (two-year collegiate course), and a larger proportion of the graduates than of the non-graduates stood high at the university. It is noticeable, however, that with the exception of students from Cape Girardeau, the non-graduate men who stood high, stood much higher than did the graduate men who were above normal.² This may indicate that altho a larger proportion of the non-graduating men who try to do university work are unfitted for it, those who are fitted for it do better work the earlier they go to the university. Evidence from a larger number of cases is needed to confirm such a conclusion.

The figures given seem to show that, all told, the students sent to the university from the normal schools represent a good grade of material, altho they do not win such uniformly high rank as the normal schools are inclined to maintain. It is commonly stated that only the best students from the normal schools go to the university at all. To test this, the lists were submitted to the normal schools for ratings

¹ These are not the literal ratings applied at the University of Missouri, but are used here for the convenience of the reader. *A* indicates the highest mark and includes the ratings "excellent" and "superior" at the university.

² Twenty-three non-graduates show a median of 109.2 as compared with seventy-six graduates with median at 106.6.

from their records with the following results:¹ In a grouping with three degrees of ability, *A*, *B*, and *C*, just two-thirds were assigned to the middle group and one-fifth were rated *A*; not quite one-eighth were rated *C*, and one per cent were considered failures. Among the undergraduates one-tenth only were rated *A*, while of the graduates one-fourth were so rated, two-thirds falling in the *B* group in each case. On the whole, the university and the normal schools agree rather closely in rating this group of students: both consider them above, altho not greatly above, the average.

B. NORMAL SCHOOL STUDENTS AMONG THE TEACHING POPULATION

A more reliable and comprehensive idea of the service of the normal schools in the state may be gained by a study of the present teaching population. Material for this is available in the statistical returns gathered by the Foundation from most of the twenty thousand teachers in the state. These returns show the actual present contribution of all the normal schools together, as well as that of each separate institution, both as to quantity and, roughly, as to quality in so far as this can be measured by salary levels. The latter are now (1919) somewhat higher than in 1915 when these data were gathered, but the relative conditions are probably much the same.

1. Teachers in Rural Schools

Defining "rural teachers" as teachers in charge of more than three grade groups in one schoolroom, there are approximately ten thousand five hundred rural teachers in Missouri.² Of this body of teachers about eight thousand three hundred replied to the enquiries of the Foundation, giving the important facts regarding their preparation and service.³

The general level of training beyond the elementary school among these teachers is indicated in the following table:

	<i>None</i>	<i>Less than one year</i>	<i>Less than two years</i>	<i>Less than three years</i>	<i>Less than four years</i>	<i>Four years</i>	<i>Five years or more</i>	<i>Six years or more</i>	<i>Seven years or more</i>
	%	%	%	%	%	%	%	%	%
Men	4	19	42	62	75	17	8	3	1
Women	2	11	26	44	58	32	10	3	1
Both	3	13	30	49	63	28	9	3	1
100%									

¹ It should be said that while the university ratings are precise, the normal school ratings were based upon a simple inspection of the total record.

² The number of "country" teachers, as that term is understood by the state department, was 9990 in 1914-15. As the term is used in this study, "rural teacher" applies to any teacher in charge of more than three grade groups in one schoolroom. There proved to be 434 of these among the replies from "graded" schools, and they were added to the rural group, of which they formed about five per cent. If 9990 be increased proportionately, we arrive at 10,515 as the number of rural school positions by this definition, of which perhaps one per cent are filled by colored teachers.

³ Data from rural teachers were gathered in two ways: (1) on cards mailed to nearly ten thousand teachers individually in the spring of 1915. Of these 5083 were returned. (2) On blanks filled by the teachers attending the county institutes in the fall of 1915 or secured from them by the county superintendents. These furnished 5045 replies, of which 1861 were from teachers who had previously written cards, and may be reckoned with either group. Included in the above is a group of 434 graded school teachers who were in charge of more than three grades and were con-

Somewhat less than two-fifths have a complete secondary education or more; less than one-tenth have as much as one year's training beyond this. Half of the entire number and three-fifths of the men have from nothing at all up to a fraction over two years of high school training. The men teachers, who constitute twenty-eight per cent of the total, are conspicuously inferior to the women at nearly every point.

The share of different institutions in producing the situation above shown is readily determined. Fewer than half—men, forty-one per cent; women, fifty per cent—of the rural school teachers of Missouri report attendance at any of the state normal schools, altho an additional ten per cent claim some normal school experience which cannot be definitely assigned. The contributions of the several schools take the following order:¹ Cape Girardeau, six per cent; Maryville, seven per cent; Kirksville, nine per cent; Springfield, ten per cent; and Warrensburg, fifteen per cent; total, forty-seven per cent. Forty-three per cent of the teachers had no normal school training, but eight per cent had passed thru high school training-classes, and three per cent had taken some collegiate or university work. The remainder, approximately one-third in all, had high school or elementary school training only.² One per cent gave no statement of training.

The duration of normal school attendance on the part of rural teachers is more significant than the proportion who have been merely enrolled. Two-thirds of these have attended not over nine months, one-fifth from ten to eighteen months, and the remainder for periods up to six years. Over one-half of the entire number indicating normal school attendance have been there but six months or less, one-third but three months or less—usually a summer session. The median attendance is the same for both men and women—six months. Inspection of this group with reference to its total schooling shows a median, in the case of men, of two years beyond the eighth grade, and in the case of women, of three years; the median attendance for the group is three years. We are dealing, therefore, with a set of teachers whose characteristic representative has attended a high school for between two and three years, and has taken six months of further secondary training together with some professional courses at a normal school.

Tho the normal school training is thus exceedingly brief, it is instructive to observe its evident influence as shown in the scale of salaries that it commands. Eighty-five per cent of those who have attended the state normal schools for whatever period are receiving more than forty dollars per month, as compared with sixty-six per cent in the case of high school graduates only, and fifty per cent in the case of high school non-graduates. The persistence of the tradition of higher salaries for men comes to light in the fact that six per cent more men than women receive over forty

considered as rural teachers. Altho the combined groups represent 8277 different individuals who taught in the rural schools in the course of some eight or ten months, some of these were the successive incumbents of the same positions. To maintain the representative distribution, therefore, the two groups have been considered separately. The facts quoted in this section were derived from the second set of returns, and are for the first half of the school year 1915-16.

¹ The several normal school districts contain the following proportions of the state's rural population; Cape Girardeau, 25 per cent; Springfield, 21 per cent; Kirksville, 21 per cent; Warrensburg, 18 per cent; Maryville, 15 per cent.

² High school graduates, 8 per cent; non-graduates, 19 per cent; elementary school only, 4 per cent.

dollars per month, altho eleven per cent more women than men have had training either at normal schools or in training classes.

The influence of the normal schools among rural teachers, meagre as it is in amount, is further weakened by conditions of legislation. The state still maintains a third grade certificate of exceedingly low standard available thru eight successive years by repeated examination.¹ This operates to postpone normal school attendance or other training to the last possible moment or shortly before the candidate is "promoted" to a graded school, if he continues to teach at all. Consequently, instead of getting the benefit even of such training as these teachers appear to have, from the beginning of their service, the schools reap the advantage of the skill that is acquired only toward the end of each teacher's career. This fact stands out when one examines the list of inexperienced teachers holding their first positions. Among the teachers reporting for 1915-16, twenty-four per cent had never taught before, and of these fewer than one-third had ever attended a normal school, the proportion falling as low as twenty-eight per cent and twenty-five per cent in the Kirksville and Cape Girardeau districts. In other words, two-thirds, and in the two districts mentioned three-fourths, of the new rural teachers were unprepared workers except for the contribution of the high school training-classes. These little institutions have been struggling bravely with the problem in spite of the handicap of immaturity in their pupils and limited facilities. As compared with eight per cent in the entire number of rural teachers they account for eighteen per cent of the inexperienced group, contributing, as extremes among the five districts, thirty-one per cent and seven per cent respectively to the Kirksville and Cape Girardeau districts referred to above.

It may be noted that even among wholly inexperienced teachers, the individuals with normal school training show that they can immediately command relatively better salaries. Comparing teachers having from one to four years of high school education, including the training-class graduates, with those having the corresponding amount of training, all or part of which has been in normal schools, the proportions receiving over forty dollars per month are as follows:

	<i>One year</i>	<i>Two years</i>	<i>Three years</i>	<i>Four years</i>	<i>Five years</i>
From High School	(90) ² 13%	(88) 26%	(75) 36%	(356) 61%	
From Normal School	(40) 28	(62) 52	(60) 60	(40) 73	(62) 77%

Age plays some part here; the student from the normal school is in general an older person than the student from the high school. The proportions nineteen years of age or less in the two series were:

	<i>One year</i>	<i>Two years</i>	<i>Three years</i>	<i>Four years</i>	<i>Five years</i>
High School	69%	79% ³	68%	66%	
Normal School	56	70	56	55	41%

¹ See page 305, note.

² The figure in parenthesis gives the number of cases.

³ The marked drop in age noticeable in the two-year group in each series may be referable to the hold of the two-year high school idea on the regular, and therefore younger, student.

Age is not decisive, however. In the normal school group, the teachers with two years of training receive over forty-five dollars nearly as frequently as the four-year high school graduates, yet seventy per cent of them are nineteen or less, while only sixty-six per cent of the latter group are as young.

2. Teachers and Supervisors in Graded Elementary Schools

Rural teachers, as we have seen, constitute a homogeneous group. Teachers in graded schools, on the contrary, are subject to conditions varying usually with the size of the town or city in which they work. The great metropolitan centres, Kansas City and St. Louis, require separate consideration; the state normal schools have affected these districts but slightly, claiming at Kansas City one-fifth and at St. Louis only three per cent of the elementary teachers. The balance of the state contains only three cities having a population of more than twenty-five thousand, and exhibits everywhere very similar characteristics, altho a few of the larger school systems have been considered separately in certain respects.¹ It is these towns and cities of the state at large together with the rural districts, rather than the great centres, that the state normal schools have served.

a. THE STATE AT LARGE (omitting St. Louis and Kansas City)

Outside of the two large cities, there were for our purpose in Missouri 3650 teaching positions in graded elementary schools.² Enquiries directed to teachers in these positions brought replies from 2334, or sixty-four per cent, of those who were teaching in the spring of 1915. Additional replies in the fall, including some from second incumbents of the same positions, increased the number to eighty-two per cent of the total, but the statements made below are based on the original group alone. The men among them numbered seven per cent.

CONDITIONS OF TRAINING

Before proceeding to show the extent to which the normal schools had participated in preparing this group of teachers, a general statement of their total education may be of interest as indicating the level to which normal school activity is at present adjusted. Grouping teachers and principals³ together, the following proportions appear in the successive degrees of training:

¹ St. Joseph, Springfield, Joplin, Hannibal, Sedalia, Webb City, Carthage, and Webster Groves. With a view to making this group representative of the size and development of the school systems rather than merely of the size of the cities, the number of teachers in the system and the salary of the superintendent were also taken into account. Nevertheless, all but the two last named are among the seven largest cities after St. Louis and Kansas City.

² This number is 85.8 per cent of the estimated number of such teaching positions. The remainder are divided among positions in colored schools, teachers of more than three grades in town or city schools, and a few teachers in both graded and high schools; these were not considered here.

³ A very few principals in the largest cities do supervisory work only; the rest manage their schools as head teachers under a superintendent.

	<i>Less than one year</i>	<i>Less than two years</i>	<i>Less than three years</i>	<i>Less than four years</i>	<i>Four to five years</i>	<i>Five years or more</i>	<i>Six years or more</i>	<i>Seven years or more</i>	<i>Eight years or more</i>
	%	%	%	%	%	%	%	%	%
Larger Systems	2	8	14	23	39	38	17	6	3
Rest of State	4	13	25	37	30	33	16	6	3
Total	3	12	22	33	32	35	16	6	3
100%									

One-sixth of these teachers possess what may be termed a standard preparation for their work—two years of training beyond a high school course; one-third are high school graduates only, or in some cases graduates who have had part of a fifth year's work also; while another third are less than graduates, one-eighth of the entire group having less than a two years' education beyond the elementary school in which they are teaching. Conditions in the group of larger systems are somewhat better than those existing in the remainder of the state.

Of these twenty-three hundred teachers about sixteen hundred, or nearly seven-tenths, had come in contact with normal schools for a longer or shorter period, and exactly two-thirds had attended the state normal schools of Missouri.¹ It is with this latter group that we are particularly concerned here.

The total training of the two-thirds who attended the Missouri state normal schools contrasts favorably with the training of the remaining third, as one would expect; the proportion reporting a preparation of one year or more in advance of high school is one-third larger, while those with less than a high school education are relatively somewhat fewer. Teachers with seven and eight years of training, however, are relatively more numerous among those not attending the normal schools; there are but few of these all told—six per cent—and they are usually residents in college towns.

The individual normal schools exhibit wide divergence of contribution to this graded elementary group. The numbers and proportions are as follows:

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	Total
Larger Systems						
Men	1	7	—	2	—	10
Women	17 5%	114 34%	9 3%	192 55%	11 3%	343 100%
Pop. of Dist. ²	9%	9%	3%	42%	37%	100%
Rest of State						
Men	12	12	26	22	9	81
Women	206 18%	397 34%	230 21%	207 19%	82 8%	1122 100%
Pop. of Dist. ³	27%	23%	26%	11%	13%	100%
Total						
Men	13	19	26	24	9	91
Women	223 15%	511 34%	239 17%	399 27%	93 7%	1465 100%

¹ Other training represented in the group was as follows: ten per cent had done some collegiate work at a college or university; thirteen per cent had done four years of high school work only, including five per cent who had attended high school teacher-training classes; six per cent had less than a complete high school education, and a few had special training.

² Proportion of the population in the eight larger cities contained within the respective normal school districts.

³ Proportion of the urban population only, excluding the eight cities, contained within the respective normal school districts

In furnishing teachers for the graded elementary schools, Warrensburg heads the list. This school supplies over one-third of the teachers even for the large systems, altho its district contains but nine per cent of their population. Part of this success is doubtless due to convenient location. To the rest of the state Warrensburg and Springfield contribute their own quotas and a margin for the other districts.

The duration of normal school attendance varies extremely. Approximately one-fourth report attendance for a single term, altho three-fifths have attended for one year or more, and one-fourth for two years or more.¹ There are minor inter-school variations due to the character of the students. Warrensburg and Springfield, for example, show a briefer attendance than the others, probably because at these schools the students in this group had longer high school training. The median length of attendance is the same at each school—three terms or one year, except at Kirksville and Cape Girardeau, where it is four terms.²

In estimating duration of normal school attendance it is of prime importance to distinguish between secondary and collegiate attendance. Single years or even single terms of collegiate work should be worth more professionally than longer periods devoted to secondary study. This distinction may readily be made on the basis of the actual number of terms of work reported. For the five schools together these amount to 5265 terms of normal school attendance, of which sixty-one per cent were taken after four years of secondary work had been completed.³

Warrensburg and Springfield lead the other schools by a fair percentage in the total, and the preponderance of collegiate work among their students employed in the larger systems again shows the effect of longer high school preparation. The same is true of those few from Cape Girardeau who teach in the larger systems, altho the entire group who studied at Cape Girardeau did a smaller proportion of collegiate work than was done at any other school.

When the total number of terms of collegiate work reported is apportioned among the five schools, Warrensburg shows two and one-half times the amount of collegiate work done either at Kirksville or at Cape Girardeau, and Springfield has provided nearly twice as much.⁴ If the average amount of collegiate work per student be considered, Maryville with almost four terms has a slight advantage, and is closely followed by Kirksville, which has much the highest average among its few representatives in the larger systems.⁵

¹ See page 438.

² The same median holds good of those who have four, three, two, or one year of previous high school preparation. Among those with less than one year, it rises to six terms or two years of normal school attendance. Reported high school preparation before coming to the normal school divides almost equally in the group as a whole between those who had four years of such training (fifty-one per cent) and those with less. Warrensburg and Springfield, with fifty-six and fifty-seven per cent of high school graduates respectively, have the advantage over Cape Girardeau with thirty-seven per cent, Kirksville with forty-five per cent, and Maryville with forty-six per cent. The accessibility of these first two schools to the larger high schools partially explains this; in fact, the distribution of the teachers themselves is indicative: Springfield and Warrensburg together, owing to their location, furnish nearly nine-tenths of the Missouri normal school product reporting from the eight larger systems, as compared with fifty-three per cent of the teachers elsewhere.

³ See page 438.

⁴ See page 438.

⁵ See page 439.

CONDITIONS OF REWARD

Salary conditions among the state's elementary teachers in towns and cities¹ afford no reassuring evidence of public concern for the teacher's preparation. Out of the entire group, which includes teachers in nearly two-thirds of the existing positions, those who possessed what may at present be termed a good preparation for their work—two collegiate years—and who received as much as \$750 annually, numbered fourteen men and eleven women, or one per cent of the total. Four times as many others received as much money but had inferior training. The prevailing—median—annual salary for all, trained and untrained alike, was \$450, while more than one-fifth received \$360 or less.

The analysis of the relation between salary and training in this group of teachers is not advantageous to the normal schools. Outside of the two great cities, sixty per cent of all the graded elementary school teachers who never attended normal schools received \$450 or more, while but fifty-five per cent of the normal school group received as much; ten per cent of the non-normal school group earned \$750 or more, while but three per cent of those who had attended normal schools did as well. When compared with their normal school colleagues in the eight larger systems taken alone, nearly twice as many of the teachers in the same systems, but without any normal school training, received \$550 or over (49 per cent—27 per cent); and over three times as many received \$750 or over (27 per cent—8 per cent).

Elsewhere in the state the conditions were not so unfavorable, but altho the normal trained teachers had slightly fewer of the very low-paid positions—ten as compared with thirteen per cent below \$350—the teachers without normal training outdid them at nearly every other point in the comparison. As we have seen, the total training of the normal school group is somewhat longer, and presumably much better for the purpose, than the preparation of the others, yet they receive consistently lower salaries.

If the institutional grouping be dropped, and account be taken only of the total amount of schooling, the situation just described is still apparent. In the small cities and towns teachers with six or more years of training above the elementary school do indeed draw higher salaries than those with less—twenty-two per cent as against ten per cent among teachers receiving \$550 or more. But in the eight larger systems, where attendants of normal schools fared so poorly, thirty-two per cent of all teachers with six or more years of training, regardless of institution, received \$550 or more as compared with thirty-eight per cent of the teachers with less training who received that salary.

It is evident from all the above figures that recognition of the value of the training which the normal schools offer is exceedingly embryonic in the minds of those who determine salaries. One would like to be able to show that the situation is only apparent and temporary, on the ground that the development of professional training

¹ Exclusive of St. Louis and Kansas City.

is still too recent to dominate the age curve of the whole group. This is partly true, for there appears, especially in the larger systems, where those who attend normal schools are noticeably fewer¹ and where salaries are larger, a long line of older teachers with little or no professional training.² These teachers have displayed the qualities hitherto regarded as desirable by their respective school boards, and have received their promotions largely on the basis of prolonged tenure—a consideration against which the best of training makes little headway.

But the consolations of this argument fail when it appears that the members of the normal school group, even age for age, in spite of distinctly longer training, are not receiving as high salaries as their colleagues who have not attended the normal schools. In the larger systems thirty-seven per cent of the normal trained teachers from ages twenty-one to twenty-five, inclusive, receive more than the median salary, \$450, as compared with fifty per cent of the others. Yet only forty-five per cent of the latter have five years or more of training, while sixty per cent of the normal school group have such training. In the twenty-six to thirty age group, thirty per cent of those from the normal schools receive more than the median, \$540, while sixty per cent of the others receive more, altho only half as many of the latter have five years or more of training. One-third of the normal trained teachers over thirty years of age receive \$600 or more, as compared with three-fourths of the others over that age. The median salary for teachers above thirty is \$555 if they come from the normal schools, but \$735 if they do not.

It is plain that the financially better elementary school positions are not open to the normal school product. The cities with the higher salary schedules are taking persons with but four years of schooling, usually directly from the local high schools, and starting them in under the supervision of experienced principals. In fact, it is probable that a large amount even of that normal school attendance which is recorded in this group consists of brief sessions taken at intervals after considerable experience has been acquired, instead of anything in the nature of systematic professional preparation for the position. The reasons for this practice will be touched upon later in summarizing the general situation.³

b. ST. LOUIS AND KANSAS CITY

The returns secured from elementary teachers in St. Louis and Kansas City were for the first half of the school year 1915-16. Positions in St. Louis at this time numbered 1789, and teachers in eighty-seven per cent of them replied to the Foundation's enquiries. In Kansas City there were 779 positions, and ninety-five per cent of them were represented by answers. Men constituted less than two per cent of the

¹ Forty-four per cent of the teachers in the larger systems never attended a state normal school, as compared with thirty per cent in the rest of the state.

² Of those in the larger systems never having attended normal schools, forty-two per cent are over thirty years of age, while but twenty-nine per cent of the normal school group are as old.

³ See page 380.

group at St. Louis, and about four per cent at Kansas City. Three-fifths of the men at St. Louis and all of those at Kansas City replied.

The reported secondary and higher schooling of the elementary teachers in the two cities gave the following proportions:

	<i>Less than one year</i>	<i>Less than two years</i>	<i>Less than three years</i>	<i>Less than four years</i>	<i>Four to five years</i>	<i>Five years or more</i>	<i>Six years or more</i>	<i>Seven years or more</i>	<i>Eight years or more</i>
	%	%	%	%	%	%	%	%	%
St. Louis	4	11	27	32	11	57	41	7	3
Kansas City	3	8	15	23	34	43	23	7	3
100%									

According to these figures, St. Louis has the advantage of Kansas City in that nearly twice as large a proportion of elementary teachers possess six years or more of training above the elementary school, altho this distinction is offset, in part at least, by the fact that at St. Louis a much larger proportion than at Kansas City have had less than a high school education. While carrying along this large number—nearly one-third—who with scarcely any training had nevertheless fitted themselves thru experience to do the work required of them, St. Louis has made a steady and notable campaign for preparation of a truly professional character; Kansas City, on the other hand, has secured at least a high school training in a greater majority of cases, but has been less concerned with higher professional preparation. The age median is the same in both cities—thirty-one.

Of the St. Louis elementary teachers, seventy-two per cent report attendance at Harris Teachers College, which is the local city training school; and an additional seven per cent attended the St. Louis Kindergarten Training School. Slightly fewer than three per cent had attended state normal schools.

The duration of attendance at these institutions varied widely. Nearly half of those from Harris Teachers College had taken two or more years of work in advance of high school graduation; this was true of about one-third of those from the St. Louis Kindergarten, and of one-seventh only of those from state schools. One-fourth of those from Harris Teachers College had done less than two years' work beyond high school. All the rest had combined varying amounts of professional work with partial high school courses.

The distribution of salaries in St. Louis in 1915-16 was apparently not favorable to the normal school product. Considering the teachers from all these schools in one group, and omitting such as hold part-time appointments, only twenty-four per cent of their number were receiving more than \$1030, as compared with forty-three per cent of those who had attended none of these training schools. And this in spite of the fact that over half of the former had had six years of secondary and higher training, and nearly three-fourths had had five years or more, while of the latter group that had not attended normal schools less than one-fourth had had five years, and one-sixth only had had six years of training.

The reason for this situation is clear. The non-training school group is relatively small — eighteen per cent only of the total number of teachers. It consists of a few with good training of standard character received elsewhere than in the local and state schools, and a large proportion whose training is very brief. The first are fairly young; thirty-one years is the median age of those with six or more years of training above the elementary school, and they are receiving relatively high salaries as teachers of special subjects not hitherto offered at the training schools in question. Those with brief training are older; forty-two years is the median age for teachers in this class with less than four years of secondary schooling, and these are receiving relatively high salaries because of their senior status as teachers. It is evident, therefore, that the discrimination against the local normal school training is only apparent; as teachers so trained attain longer experience, and as the schools themselves develop their special departments, the higher salaries will presumably become available in greater proportion.

At Kansas City all local and state agencies together have trained but forty-one per cent of the total number of elementary teachers. Training courses in Kansas City are reported by twenty-two per cent and attendance at state schools by nineteen per cent.¹ Eighty-seven individuals, or twelve per cent of the total number, reported two years or more of higher professional training in these Missouri schools, following four years of secondary work. This is but slightly over half of the whole number credited with such training. Almost one-third of the remainder attended school elsewhere in Missouri, chiefly at the university, and two-thirds came from abroad, well distributed over twelve states, of which Kansas sent the most.

The comparative salary situation in 1915-16 at Kansas City was the same as that at St. Louis, but apparently requires a less favorable explanation. With part-time kindergarten teachers omitted, the group in Kansas City that had never attended either city or state normal schools was very large—sixty-four per cent of the total, and age for age outranked the normal school representatives in salary as follows:

<i>Ages</i>	<i>Receiving</i>	<i>Of those attending local or Missouri State Normal Schools</i>	<i>Of the Remainder</i>
		<i>%</i>	<i>%</i>
20 or less	over \$600	53 of 30	67 of 6
21-25	over 650	52 of 69	93 of 82
26-30	over 900	54 of 26	65 of 88
31-35	over 950	54 of 28	73 of 56
36-40	1000 or more	70 of 33	83 of 65
41-45	1000 or more	81 of 21	80 of 54
46 or over	1000 or more	81 of 26	95 of 60
Total	over \$750	57 of 233	84 of 411
Having five or more years of training		63	26
Having six or more years of training		32	10

In every age group but one the reward of the normal school product falls behind

¹ Kirksville, two per cent; Warrensburg, fifteen per cent; Springfield, one per cent; and Maryville, one per cent.

that of teachers prepared elsewhere, or, most frequently, not at all. Yet the group from the normal schools is overwhelmingly superior in amount of training; the proportion with six or more years of secondary and higher training is over three times as great as it is among the others. To be sure the age of these well-trained teachers is low—twenty-seven years in the group as a whole as compared with a general age median of thirty-one, and twenty-four in the normal school contingent as compared with thirty-five among those few with as much training from other sources; but that fails to account for the marked contrast within identical age groups where age and teaching experience run nearly parallel. The attendants at the state schools are in somewhat better case than those from local normal and kindergarten schools, sharing the better salaries on an almost even basis with the untrained whom they would be expected to outdo.

Whatever be the cause, these students, in spite of their longer preparation, simply do not attain the positions that the school authorities most largely reward. This may be because the meagre type of training is not sufficiently convincing, or because conditions in the school service are such as to reward routine conformity, and perfunctory rather than intelligent teaching. The first is certainly the case to a considerable degree, if the findings of this study may be trusted, and the second is by no means impossible in a system that has for so long employed teachers with a minimum of education.

Principals of elementary schools in large cities are of course school officers of the first importance. The enquiries of the Foundation elicited response from eighty-four per cent of those at St. Louis and from a similar proportion at Kansas City. The status of formal preparation among these men and women exhibits comparative features not unlike those discovered among the teachers over whom they preside.

	<i>Less than one year</i>	<i>Less than two years</i>	<i>Less than three years</i>	<i>Less than four years</i>	<i>Four to five years</i>	<i>Five years or more</i>	<i>Six years or more</i>	<i>Seven years or more</i>	<i>Eight years or more</i>	<i>Total Number</i>
	%	%	%	%	%	%	%	%	%	
St. Louis										
Men	4	6	16	20	12	68	59	43	33	49
Women	7	14	46	53	18	29	21	4	4	28
				100%						
Kansas City										
Men			5	5	16	79	47	32	21	19
Women	3	13	25	41	41	18	9	3		32
				100%						

St. Louis principals include a larger proportion with advanced professional training than do those of Kansas City; the latter, on the other hand, show fewer whose qualifications appear to depend so wholly upon experience.

At St. Louis two-thirds of the principals are men; at Kansas City more than half are women. Even so, the state and local normal schools are represented to almost

exactly the same extent in each group—forty and forty-one per cent. At St. Louis only six out of twenty-eight women principals report as much as two years of collegiate training, but all except six went to a normal school; at Kansas City three out of thirty-two women principals had as much training, and only nine of the number had attended a state or local normal school. Two-thirds of the men principals, however, at Kansas City had attended normal schools as compared with one-fifth only in St. Louis.

Salaries show the customary lack of respect for normal school training, at least among the women. At Kansas City men from normal schools receive as much as those from outside—\$2000. At St. Louis ten years' difference in ages—thirty-eight to forty-eight—is doubtless a partial reason for the forty outsiders receiving \$3000 as compared with \$2500 that is paid the nine normal school representatives. Another and sufficient explanation is that the former are much more frequently college graduates. The outside group of women at Kansas City receive \$1750 as compared with \$1700 paid to their normal school colleagues; and at St. Louis the six women not from normal schools, with an age median of fifty-three years, receive \$2425, while the twenty-two women in the normal school group, with an age median of forty-eight, receive only \$1560. Only one of the six reported as much as one year of collegiate training, while twelve of the twenty-two had one year, including five who had two years of such training.

3. *Teachers and Supervisors in High Schools*

High schools in Missouri may be arranged in three groups: Fully state approved four-year schools, termed *first class* high schools; partially approved three-year and two-year schools, termed *second* and *third class* high schools; and unclassified schools, some of which are nevertheless allowed a certain number of approved credits. These classes constitute a series of progressive stages in the development of a high school, and imply to a degree a similar progress in the qualifications, salary, and prestige of the persons who teach in them. That is to say, the typical third class school is not merely half of a first class school equally well managed and equipped, but is usually inferior in personnel, equipment, and organization, even tho it satisfies the minimum requirement of the state department of education.

a. THE STATE AT LARGE

In 1915 there were eleven hundred sixty-four¹ teaching positions in classified high schools outside of St. Louis and Kansas City, and ninety-two per cent of these were represented in the replies filed for the enquiry. Fifty-nine replies from teachers in

¹ This number includes the principals in towns having superintendents. In towns not so provided the principals of the high schools have been taken to represent the superintendents and will be studied in a later section. They number 321, of whom 246, or 77 per cent, responded to the enquiries of the Foundation. (See page 376.)

unclassified schools indicated some fourteen more positions than were known to the state department. With such full representation, the information as to high school teachers is probably as accurate as complete returns would make it.

Few high school teachers report less than a complete secondary course, and of these over half had attended a normal school. About nine-tenths of the teachers in first class schools had five or more years' preparation; close to one-half reported the full eight years of a well-trained instructor. The stages of training beyond the elementary school among teachers in all types of high school in the state at large appear in the following table:

		<i>Less than four years</i>	<i>Four to five years</i>	<i>Five years or more</i>	<i>Six years- or more</i>	<i>Seven years or more</i>	<i>Eight years or more</i>	<i>Nine years or more</i>	<i>Total</i>
<i>First Class</i>									
State at large		%	%	%	%	%	%	%	
	Men	5	6	89	75	59	45	17	212
	Women	5	6	89	73	59	44	13	626
	Both	5	6	89	77	59	45	14	838
		100%							
Kansas City									
	Men	14	5	81	74	69	56	34	109
	Women	11	15	74	63	55	48	18	130
	Both	12	11	77	68	61	51	25	239
		100%							
St. Louis									
	Men	5	4	91	90	86	73	41	172
	Women	11	3	86	81	70	62	24	157
	Both	8	3	89	86	78	68	33	329
		100%							
<i>Second and Third Class</i>									
State at large									
	Men	17	25	58	47	34	19	3	59
	Women	9	11	80	67	36	20	4	177
	Both	11	15	74	62	35	19	4	236
		100%							
<i>Unclassified</i>									
State at large									
	Men	36	18	46	23	9	5		22
	Women	8	22	70	51	32	14		37
	Both	19	20	61	41	24	10		59
		100%							

The amount of training falls off rapidly in the lower classes of schools, and the training of the men, which in first class schools was slightly better than that of the women, becomes markedly inferior in unclassified schools.

The crediting of training to different institutions, or types of institutions, is complicated by the considerable amount of transfer that has taken place, especially between the normal schools and the university. Twenty-eight per cent of all the teachers in classified high schools have done collegiate work both in the Missouri state normal schools and in colleges or universities, or in a few cases in other normal schools, either within or outside of the state. Seventeen per cent, or one-sixth, did their collegiate

work in a Missouri state normal school only, while forty-seven per cent,¹ or nearly one-half, did all of it elsewhere. Eight per cent reported no collegiate work; slightly over one-half of these had done their secondary work at a Missouri state normal school. All told, fifty-two per cent¹ of the teachers in classified high schools had at some time attended one of the state normal schools. Eleven per cent did all of their work at the state university, while more than one-third attended there.

The statements just made need immediate qualification, however, in view of the wide disparity between the two types of institution as to the actual amount of work done by the students in each. It is well also to consider the fully representative first class schools by themselves in such a matter. In this group those who went only to college or university numbered more than half,² and two-thirds of them had eight full years of training, while those prepared only by the normal schools numbered but one-eighth, and three-fourths of them had but six years' schooling altogether. A combination group that attended both normal school and college constituted twenty-eight per cent, and one-third only had completed eight years of work. Six per cent had done no collegiate work. It will be apparent, therefore, that the actual weight of influence of the normal schools, as measured in school attendance, is relatively small among first class high schools, altho it is by no means negligible.³

Among the second and third class schools the normal school, college, and combined groups above distinguished are numerically more nearly equal, with the normal school group somewhat ahead, but here again the balance is considerably in favor of the college group owing to longer attendance by its representatives.⁴

The numerical contribution of the different normal schools to the high school staff of the state is extremely unequal and somewhat unexpected, as the two schools that have long laid the greatest apparent emphasis on their facilities for preparing high school teachers have proportionately fewer in actual service than the others. Warrensburg heads the list, having enrolled over two-fifths of all the teachers in first class high schools who attended normal schools at all.⁵ Together with Springfield, it accounts for fifty-seven per cent of these teachers, while Kirksville and Cape Girardeau, with twenty-seven and eleven per cent respectively, contribute thirty-eight per cent. Maryville's share is comparatively slight—five per cent.⁶

¹ Includes three per cent who did secondary work at a normal school but collegiate work elsewhere.

² See page 439.

³ The proportion of degrees shows the same general situation. One-fourth of the teachers hold only the two-year normal school degree, and three per cent, the four-year normal school degree. From universities and colleges forty-eight per cent hold four-year degrees, including four per cent with the master's degree.

⁴ In second and third class schools, two-fifths hold the two-year normal school degree, three per cent the four-year normal school degree, while twenty-two per cent have four-year degrees from colleges or universities.

⁵ See page 439.

⁶ The median representative of each school has a total preparation of six years beyond the elementary school. At Springfield, Kirksville, and Maryville nearly half had more than six years; at Warrensburg this proportion is three-eighths, and at Cape Girardeau it drops to one-fifth. In most cases, of course, those who secured prolonged training received the latter part of it at other institutions than normal schools. Nearly four-fifths of the group attending normal schools have attended summer sessions, with a median of three sessions each, and about one-half have taken four years of high school work before attending a normal school. Among first class schools this latter characteristic varies from three-fifths at Springfield to one-third at Cape Girardeau.

The usual—median—period of normal school attendance on the part of teachers in high schools of all classes was two years for women and three years for men. Kirksville shows four years for men in first class schools. About one-sixth of the teachers in first class schools who attended normal schools at all, attended for one or two terms only, one-third for less than two years, and one-fourth for four years or longer. These periods are for total attendance including secondary work.

The relative salary situation of the normal school representatives in high schools is rather better than one would expect, considering the disparity in amount of training between themselves and the college contingent. The men of the group among first class schools receive a median of \$810¹ annually as compared with \$850 for all male high school teachers in such schools and \$900 for all those who had attended a college or university but not a normal school. The thirty men who attended only normal schools received \$700, while twenty-five who attended both a normal school and the state university received \$810, and eighteen who attended only the state university received \$875.

The median salary of all women teaching in first class high schools was \$630, and the women who had attended normal schools received the same.² Those from the state university without normal school attendance received \$675, as did those who had attended other schools. The ninety women trained only in the normal schools received a median of \$585, while those from the university only, or who had attended both, received the general median of \$630. Women from the normal school group with seven or more years' training received \$675, as did those from the university group.

b. HIGH SCHOOL TEACHERS IN KANSAS CITY AND ST. LOUIS

The replies to the Foundation's enquiries from high school teachers in Kansas City and St. Louis numbered ninety-eight and ninety-six per cent respectively out of possible totals of two hundred forty-five and three hundred forty-three.

In Kansas City the general level of training of high school teachers is somewhat, tho not greatly, above that prevailing among first class high schools in the remainder of the state.³ At the same time the proportion of teachers with less than four years of preparation above the elementary school is more than double. This is doubtless due to a system of more permanent tenure whereby a teacher in a large city system, once established, is likely to stay without obligations for further preparation, whereas in small cities the freer conditions either improve or eliminate him, altho the maximum standard may not be so high. The same condition appears to a less extent in St. Louis. Those in Kansas City who have eight years of training constitute fifty-one per cent, as compared with forty-five per cent in the state at large, and sixty-eight

¹ This was likewise the median for men from Kirksville. Those from Warrensburg and Springfield received \$900, those from Cape Girardeau, \$765, and those from Maryville (5), \$720.

² The median among women teachers from Springfield was \$675; from Maryville, \$585; elsewhere it agreed with the common figure.

³ See page 373.

per cent in St. Louis. In the total number with as much as five or six years' preparation, Kansas City actually falls about ten per cent behind the remainder of the state, tho this is partly offset by those who have done graduate work. The distribution is that of a city that has recently raised its standards, but for new appointees only.

In St. Louis more than two-thirds of the high school teachers show a complete collegiate training, and half as many have done advanced study.^{1 2}

The contribution of the state normal schools to the high school staffs of Kansas City is slight — thirteen per cent.³ Seventeen per cent had attended the state university. Here also there was much transfer from one institution to another; fewer than half of these had done their collegiate work only at the university. Three per cent had attended other Missouri institutions.

In St. Louis three high school teachers had at some time attended Missouri state normal schools, but had received most of their training elsewhere. Harris Teachers College had enrolled thirty-six, or eleven per cent, for short periods, but only six had attended nowhere else. One-fourth of all the teachers had attended other Missouri institutions, including six per cent who went to the University of Missouri.

Altho the number in the group is small (thirteen), it may be of interest to observe that at Kansas City the median individual in the group of women teachers partly trained at normal schools received \$1450 as compared with \$1200, the median salary of all other women teachers. At St. Louis, likewise, the median individual among thirty-three women partly trained at normal schools and Harris Teachers College received \$1520, as compared with \$1360, the median salary of other women teachers. Other factors than mere attendance at these schools — often very brief — probably operated to produce this result.

4. *City and Town Superintendents*⁴

There were estimated to be five hundred thirty-eight positions for white superintendents or head teachers in Missouri in 1915. The holders of eighty-three per cent of these replied to the enquiries issued by the Foundation. Of superintendents in

¹ In Kansas City thirty per cent of the men and over half of the women teachers lack degrees of any kind. In St. Louis these figures are sixteen and thirty-seven per cent respectively. Normal school degrees numbered six per cent in Kansas City and two per cent in St. Louis.

² See page 373.

³ One person with collegiate training secured solely at a normal school was teaching in Kansas City, altho a total of thirty teachers had a part of their training at normal schools — twenty-five at Warrensburg, and five at Kirksville. Seven had stayed as long as two years. Only eleven of the thirty secured a full collegiate course in all; eight others did only secondary work at normal school; the remainder had taken collegiate work in varying amounts in at least two institutions.

⁴ The responsible officer in a Missouri town or city school system is called the "superintendent" in nearly all districts that maintain a first class high school and in some that do not. Where this is not the case, the local head is termed a "principal," and the supervisory authority is technically vested in the county superintendent. In almost four-fifths of the cases, however, even the "superintendent" is likewise a teacher, and purely supervisory duties shade off imperceptibly into those of a head teacher as one goes down the list from large cities to small. It is reasonable, therefore, by merging principals with superintendents, to consider these leading figures in the local organizations in a single group. Classification according to the type of high school over which they preside brings out clearly their essential traits. In the second and third class and in unclassified schools where these officers are the chief teachers, the description of their training will serve as an important supplement to the treatment of the high school teachers.

districts containing first class high schools ninety-four per cent replied.¹ The latter are, of course, the best trained and best paid individuals of the group, and constitute the educational leadership of the state so far as the public school organization is concerned.

In general, the superintendents of school systems in Missouri possess the following educational background of training in advance of the elementary school:

	<i>Less than four years %</i>	<i>Four years %</i>	<i>Five years or more %</i>	<i>Six years or more %</i>	<i>Seven years or more %</i>	<i>Eight years or more %</i>	<i>Nine years or more %</i>	<i>Ten years or more %</i>	<i>Total</i>
First Class	6	12	82	67	54	39	24	8	144
	100%								
Second & Third Classes	11	23	66	48	29	19	4	1	150
	100%								
Unclassified	31	13	56	31	17	9	2	1	150
	100%								

The median number of years of training beyond the elementary school is seven in the first group; two-fifths have had eight years, including one-fourth who have done graduate work in addition. In the second and unclassified groups the median drops to five years, but with a considerable difference within the group area, as is shown by the difference in the proportions with six or more years of training.

It appears from the table that one-third of the school superintendents in charge of so-called first class school systems have had, all told, not more than a four-year high school course and one year in college or normal school after they left the eighth grade; and among those presiding over second and third class systems more than one-half are similarly equipped.² Missouri has evidently laid little emphasis on schooling as compared with "practical experience" in selecting these officers.

The part played by the different agencies in accomplishing the training of Missouri superintendents is difficult to describe accurately owing to the very general intermixture of training received in various institutions. Among superintendents in first class districts, one-tenth have attended neither normal school nor state university; one-fifth attended the university only (five per cent), or the university and some college, but no normal school; one-tenth attended only normal schools; just over one-half attended both university and normal schools, and in a few cases, still other institutions; and the remainder attended both normal schools and institutions other than the university. Convenient summer sessions with their brief unit courses have led to this wholesale migration — an important educative factor in itself, provided

¹ From second and third class high school districts 80 per cent sent in answers, and from those with unclassified schools, 77 per cent.

² Degrees of any kind are lacking in 15 per cent, 29 per cent, and 64 per cent respectively, of the three groups of superintendents under discussion. Two-year normal school degrees are held by 39 per cent, 52 per cent, and 24 per cent, while 5 per cent, 4 per cent, and 4 per cent have taken four-year degrees from normal schools. College and university degrees number 41 per cent, 15 per cent, and 8 per cent, including 9 per cent, 1 per cent, and 1 per cent who hold one-year graduate degrees; there are no doctor's degrees.

the work done does not degenerate into mere desultory sampling of one school after another.

The median years of work done at the normal schools by members of the first group was three—most of it collegiate. Three-fourths of those attending did part of this work in the summer in three and one-half summer sessions each; thus about one-third of all their normal school work was done in this way. In intervals of such study, or after it, three-fourths of those who went to the normal schools took work at the university also. This amounted to a little less than one year, and in two-thirds of the cases was done only in summer sessions; hence the median schooling at normal schools and university of those presenting this combination was nearly four years divided as stated, and most of it of collegiate character. Those who did not attend normal schools spent a slightly longer period at the university—in addition, of course, to what other collegiate work they may have done elsewhere. The total collegiate training in the case of all those not attending the normal schools amounted to three years. The median period of attendance at the university on the part of all superintendents in first class districts who enrolled there was somewhat more than one year.

Kirksville and Warrensburg prepared by far the largest number of all superintendents in first class districts enrolled in normal schools—sharing almost equally four-fifths of the group. Maryville took four per cent, and the others divided the remainder. Eleven individuals did their collegiate work wholly at Kirksville and four wholly at Warrensburg. Only seven of the one hundred three first class superintendents who attended the university did collegiate work nowhere else.

The so-called “superintendents” or “principals” in districts not maintaining first class high schools in 1914-15 were of course primarily high school teachers and might have been considered in that group. They were, however, more than that. The educational leadership both of the school and of the community usually devolved upon them, and from that point of view they deserve special consideration.

As shown in the table already given, the average member of this group has had a secondary course somewhere, either at high school or normal school, or both, and a year more of collegiate work which he has usually picked up at various schools in summer sessions. More than four-fifths of the large total of three hundred have attended the normal schools; scarcely ten per cent ever went to the university without going to the normal schools, tho about half of the second and third class group and a little less than one-fifth of the unclassified group—a total of one hundred one—did attend the university for somewhat more than one summer session each. Their median attendance at normal school came to between two and three years—a large part of it secondary work to be sure, as fewer than one-third brought four years of high school training with them.

The work of preparing the heads of lower class districts was shared more equally by the normal schools than was the case with the first class superintendents. Maryville

The median salary in the first class of superintendents as a whole stood at \$1250; in the second and third together, \$900; and in the unclassified group, \$680. Among those who attended the normal schools, the median was fifty dollars lower in the first class; it was the same as the general median in the second and third classes, and likewise in the unclassified group. The highest paid group of superintendents were the sixteen men in the first class who had attended neither the Missouri normal schools nor the state university; they received \$1500. Those in the first class who attended the university but not the normal schools received \$1375. Long training drew comparatively larger salaries in the better positions. Those with eight years or above received \$200 more than the others in the first class, \$100 more in the second and third, but the same amount in the unclassified group of which they constituted but a small proportion—nine per cent.

The county superintendent of public schools is the man on whom the educational welfare of the smaller communities in the state at large directly depends. In places of sufficient size to have a superintendent of their own there is usually some sort of a school "system" into which this executive fits. But in the case of the county superintendent this is lacking—he is himself the system; it is especially necessary, therefore, that he should be a man of superior ability and training, the right-hand agent of the state superintendent, who should have administrative control over his qualifications, appointment, and work.

In Missouri the county superintendency was achieved only after a long struggle against traditional opposition, and represents a compromise which for three vital reasons largely destroys the efficiency of the position: The officer is elected by popular vote, must be a citizen of the county in which he is elected, and may possess only nominal qualifications for his work. Such executives are probably better than none, and may occasionally be successful, as certain of the county superintendents in Missouri, and those not invariably the best trained, clearly prove; but the average of their performance is admittedly very low, and an inspection of the following general statement of their training in advance of an elementary education makes the reason why it is low sufficiently evident.

<i>Less than two years</i>	<i>Less than three years</i>	<i>Less than four years</i>	<i>Four years</i>	<i>Five years or more</i>	<i>Six years or more</i>	<i>Seven years or more</i>	<i>Eight years or more</i>
10%	15%	28%	16%	56%	38%	25%	15%
100%							

Data were supplied by all of the ninety-five men and nineteen women on duty in the one hundred fourteen counties of the state. The median number of years of training above the elementary school for both men and women was five ; more than one-fourth had less than four years, while one-fourth had more than six years. Eight years of school work, or the preparation usually required of a good high school teacher, had been completed by fewer than one-sixth of the total. Yet the state is depending upon such persons to direct and vitalize intelligently the educational processes to which its total rural and village school population is subject! Cheerful inadequacy of educational procedure in a sovereign American democracy could find no more revealing illustration.

Seventy per cent of the number have at some time attended a normal school,¹ but for brief periods as far as collegiate work is concerned ; one-half of these have done either secondary work only or less than one year's work beyond secondary requirements. Seventeen per cent have attended both the normal schools and the university, and seven per cent, the university but not the normal schools. Just over one-fourth hold two-year degrees or better, and fewer than one-tenth have four-year degrees.

Salaries reflect the training to a considerable extent. The median annual salary in the group of fifty having four years or less of training beyond the elementary school is \$900 as compared with \$1200 in the group of sixty-four having more than four years of preparation. Those who have attended normal schools and the university for whatever period receive a median of \$1100, as compared with \$975, which is the median for the twenty-six others. The nineteen women receive \$1100, and have slightly better training than the ninety-five men who receive \$1000.

The situation as to the professional training of the county superintendents that has been indicated above is deplorable, and is fully appreciated by the normal schools and by the university. Efforts have been made at all the schools to inspire and assist these public servants in discharging heavy responsibilities little appreciated by the state at large. The betterment of their professional equipment is wholly voluntary on their part, however, and under the political arrangement in vogue it cannot be wondered at if the majority feel that their time is more profitably spent in repairing their "fences" rather than their education. A state that will tolerate such a system must expect to reap its legitimate fruits in the low vitality and slow progress of its educational interests at the very point where growth should to-day be most rapid.

C. WHAT HAVE THE NORMAL SCHOOLS DONE FOR THE STATE?

NORMAL SCHOOLS MOST EFFECTIVE IN SMALL COMMUNITIES

In characterizing the achievement of the normal schools as revealed by their product in actual service, a few striking facts engage the attention at once. First, with regard to geographical limitations. The normal schools scarcely touch St. Louis, and

¹ Four per cent have enrolled at Maryville. The other schools have each drawn practically one-sixth of the total.

with the development of Kansas City's local training school they will in the future have even less access there than heretofore. Furthermore, altho a majority of elementary teachers in the next largest urban centres have at some time attended normal schools, the financial position of those who have not attended them is much better than that of those who have. This can be partially accounted for by the fact that those who have not attended normal schools are older teachers who are drawing higher salaries. Nevertheless, the relation holds good even age for age from the very outset, indicating that the situation is one of serious significance which the normal schools may well take to heart.

Systematic enquiry thru these larger systems showed that while the work of the normal schools was approved as valuable for broadening teachers when already in service, yet for practical initial results the superintendents preferred teachers taken directly from their own high schools, especially if they had teacher-training classes. Such people knew the ground, and could shortly be trained to fit, while a stranger from the normal school not only needed an equal amount of special training, but often brought curious and fixed ideas that must first be modified before she could succeed. Thus because of the generalized, indefinite preparation which they have emphasized, the normal schools never have made their service indispensable to these larger systems as they might have done. Several of the cities would gladly have established their own training schools had they been able to afford it.

In the small cities and in the towns, on the contrary, the normal schools have been thoroughly at home. Here a paternalized board control, frequent changes in superintendents, and a generally undeveloped educational situation have made the varied accessions from the normal school assimilable because they were more responsible than high school graduates who, under the circumstances, could not be well supervised. Such a situation in turn has appealed to the normal schools, interested as they were primarily, not in furnishing teachers technically competent for specific tasks, but in giving boys and girls a general education thru teaching as a means of support *ad interim*.

NORMAL SCHOOL INFLUENCE WIDESPREAD BUT VAGUE

Secondly, in respect to the scope of normal school activity, the situation answers perfectly the desires and claims of the most catholic normal school enthusiast. Most frequently as an interlayer, a veneer, or merely as a wash, but rarely as the solely sufficient institutional preparation for a teacher, normal school experience occurs plentifully in every grade of the profession in Missouri. In 1915 nearly one-half of the country school teachers had attended normal schools for six months;¹ two-thirds of the teachers in graded elementary schools had attended the normal schools for one year. More than half of all teachers in classified high schools, outside of St. Louis and Kansas City, had attended the normal schools for two years; in first class high schools

¹ This and the similar measures of attendance which follow should be understood as the median in each case.

two-fifths of the teachers had such training, and in the second and third class schools, the great majority. Two-thirds of the city and town superintendents in first class districts, and four-fifths of the remainder, had attended normal schools—the first for a period of three years. Of county superintendents, seven-tenths received part or all of their professional schooling in these institutions. Of course a very large amount of all this has been secondary work only. Nevertheless, the normal schools have clearly made themselves part and parcel of the educational fabric of the state, especially in its smaller centres and rural districts.

But it is the nature of this extraordinary performance that gives it its chief significance. When it is remembered that an appreciable part of the work was done in summer sessions, often after the student had already taken his position; that classes were generally made up of several kinds of student at once, so that the same course was obliged to function for a superintendent as “school administration,” for a principal as “school management,” and for a teacher as “class management;” when the amount of brief, irregular attendance is recalled, as well as the almost complete lack of sequence or coherence in the courses themselves; when all these conditions are considered, the results before us appear as an indistinguishable blur. Courses dealing distinctly and adequately with the problems of the principal, the superintendent, or even of the high school teacher could not succeed at the normal schools, to say nothing of whole curricula for such persons. It was thought necessary, therefore, if they were accommodated at all, to fall back on *general* courses, and because this was thought to be necessary, it became part of the normal school’s theory of teacher-training—such courses for all comers were unifying and democratic, ran the doctrine; specific training was either needless or should be obtained only in practice.

The normal schools may claim with much force that this adjustment has suited the existing conditions; that with legislation such as it was, there was no alternative but to offer to fit everybody for everything, since in fact this was about what everybody did. It has been one of the objects of this report to point out the weakness of such efforts, and to urge that the normal schools themselves lead the movement to convince the Missouri public that its educational problems are real and difficult, that they require people of special ability and prolonged specific training for their handling, and that only such persons should be allowed to qualify for the public service. Such a policy is the only one that is defensible educationally to-day, and furthermore, it is the only one that will win the confidence of school systems sufficiently developed to have discriminating requirements.

GOOD TEACHERS IMPOSSIBLE AT THE PRESENT ECONOMIC LEVEL

A final characteristic, not so much of the normal school product as of the conditions vital to the quality of that product, appears in the data already cited, with force calculated to appall the student of education in a democracy. Teachers and school officers who have studied at the normal schools for any considerable period do

indeed appear to receive usually a little more money than those who have not, but where it exists, the difference is so minute as only to compel attention rather to the utter absurdity of the general economic level itself. Rural teachers receive \$45 per month for six or eight months; graded school teachers¹ receive annually \$450; high school teachers,¹ \$675; superintendents, the educational chiefs-of-staff, receive, in first class cities, \$1250, elsewhere, \$900; and county superintendents, the state's highest educational officials in direct contact with schools, \$1075.²

Why take the trouble to point out that one group receives an annual salary of \$500, whereas another receives but \$450, when both sums are plainly less than the increase alone should have been during the recent period of rising prices? Missouri would have education for its youth—education which is obtainable only from selected and skilled men and women who themselves possess it as professional capital for this purpose. Yet to obtain it the state bids an amount that would shame an unskilled farm hand or the lowest class of street laborer. The situation would be incredible were it not real. This is not an invective based upon a sentimental feeling for the poverty-stricken teacher; he is indeed a conscientious and devoted worker, and on the score of good intentions alone undoubtedly deserves more than he receives. The really desperate facts in the case are of quite another nature. They have to do solely with the crying needs of the children for whom teachers are employed. On the whole, Missouri is getting to-day just what it pays for—a palpably crude, ignorant, and wasteful performance in elementary and secondary instruction in which its boys and girls are the constant and final sufferers. It would be foolish to pay much more for this.

Suppose, on the other hand, that Missouri were to enlarge and utilize in the elementary and secondary schools, alike in town and country, its present fifteen hundred dollar class in the professional population—the class well represented to-day, say, by the men and women now teaching in the normal schools and in some of the smaller colleges. These constitute a well-prepared and carefully selected body of teachers capable of giving genuine instruction in elementary and secondary schools. Fifteen thousand of them could be had in a short time if the state chose to triple its investment in teachers salaries; and the resulting educational transformation would prove immediately to the blindest citizen that what he is now taught to regard as good public education is but a travesty on what is actually available, and what he himself could easily, and would gladly, pay for. Why should St. Louis have accomplished teachers while a remote county in the Ozarks, with just as capable and deserving boys and girls to educate, puts up with instruction that is wholly inefficient and depressing? The state exists to equalize these differences. It can do it, and it ought to do it.

¹Excluding St. Louis and Kansas City.

²Changes since 1915 have tended to convert these medians into minima without, however, altering the general situation.

It is obvious, of course, that under these conditions the normal schools have not provided, and could not provide, the state with good teachers as that term must truthfully be interpreted. They have moved steadily and industriously along, reflecting the public's generally low conception of what good teaching meant, but maintaining the personally high character and ideals of their students. If granted by the state a commission to prepare real teachers of expert attainments and the means wherewith to do it, there is no reason to believe that they would not speedily and successfully adjust themselves to that task.

X

LINCOLN INSTITUTE

LINCOLN INSTITUTE, located at Jefferson City, is the state's school for colored teachers. The manner of its origin is probably unique. The institution was established upon a slender foundation of \$6379 contributed in 1865 by the veterans of the Sixty-second and Sixty-fifth Regiments of the United States Colored Infantry, that the children of their race in Missouri might have a useful education. Richard B. Foster (white), a New Englander educated at Dartmouth and a first lieutenant in the Sixty-second Regiment, organized and for six years assisted in conducting the school. In 1879 it was relieved of debt and taken over by the state, which has since provided its support.

The problems of this very appealing little enterprise are of such a special and peculiar nature as to preclude their satisfactory discussion within the limits of the present volume. It seems permissible, however, even without presenting the evidence, to record briefly the impressions that a careful examination of the institution made upon those engaged in the enquiry.¹

Colored persons constitute less than one-twentieth of Missouri's total population and tend to diminish in relative numbers. The colored teachers required in the state are therefore few—less than eight hundred all told in 1915.² Nevertheless, the state constitution requires that such teachers be educated separately from white teachers. This being the case, it is manifestly to be expected that the training provided should bear favorable comparison with that afforded white teachers; much as the admirable high school advantages for colored youth in St. Louis may be fairly compared with the opportunities supplied for children of white parents.

This expectation is very far from being realized. The essential character of the school as at present conducted is epitomized in the catalogue announcement that its president is professor of "Psychology, Educational Psychology, Rural Pedagogy, Sociology and Latin, Modern and Medieval History, Economics, Logic, and Director of the Training School," and that its students have opportunities for "a college course, the same as students at the State University at Columbia." Actually, the "college department," for which an elaborate curriculum is set forth, does not exist; considered on its merits, all of the school's work, the normal department included, is on a secondary level or below, and has apparently always been so. Curricula could not be discovered, and the training department is a pathetic delusion. It requires something more than the degree-granting powers lavishly bestowed by the Legislature, and the pretentious claims of a catalogue, to maintain a school.

On the other hand, if properly labeled, much of the instruction, especially in technical branches, would undoubtedly appear worthy and suited to the needs of the stu-

¹ The school was visited in 1916. Changes are known to have taken place since then, notably in the directorship, but with what effect has not been ascertained.

² *State Report*, 1915, page 230.

dents. The academic work is of a highly formal character, but the teachers seem in many cases to be well educated. So far as could be discovered, the students' life at the school was wholesome and profitable.

The chief weaknesses in the institution appear to arise, first, out of a lack of capable leadership and, second, out of too little protection from political disturbance. Competent testimony indicated that an upheaval was expected at least with each change of the political administration and occasionally oftener. The school is under the very shadow of the capitol, and owing to its peculiar nature is exposed to special manipulation. It would be a great relief to the institution, not to speak of the educational gain that would surely follow, if it could be placed in charge of a good state board of education as suggested elsewhere for the normal schools.

It hardly needs to be pointed out that no school can be expected to thrive without adequate leadership and without provision for automatic educational inspection and stimulation from without. If a competent director for the school cannot be found among colored candidates,—a contingency that is difficult to believe,—a white man should certainly be installed. The state as a whole has no interest in providing perquisites for the colored race, but it is interested in giving the members of that race in Missouri access to an appropriate and thorough education of modern type. Even among the responsible educators of the state the situation as it exists is regarded as a joke, and it would rightly be so considered were it not so pitiful and so unnecessary.

If the organization of teacher-training agencies elsewhere described¹ were to be developed for the university and normal schools, the director of Lincoln Institute should be included in the professional board having immediate charge of supplying teachers. In the case of St. Louis, already referred to, the principal of the high school for colored students meets with the other high school principals in their professional deliberations and receives the inspiration of their criticism and advice. The same relation in the case of the schools established to promote the state's interest in good teachers would be equally desirable and proper.

XI

SUMMARY OF PROPOSALS FOR THE PREPARATION OF MISSOURI TEACHERS IN NORMAL SCHOOLS

PURPOSE OF THE PROPOSALS

THE chief problem at present confronting the State of Missouri, like that in most other states, is how best, with state funds and thru state control, to ensure adequate education for all of its youth throughout the twelve-year period terminating in general when the pupil becomes eighteen years of age. Adequate education is primarily a matter of competent teachers, and the provision of competent teachers is a single clearly defined task outranking in importance all other state obligations save only the maintenance of social order and the protection of the public health, and is superior even to these except in the sense that without them it could not be achieved.

To provide itself with teachers, the State of Missouri has availed itself of various agencies originating in different ways and hitherto pursuing an independent development. In their earlier stages these uncoördinated instrumentalities wrought well on the whole; their utmost labors have successfully reduced a colossal need. Of late, however, the clearer definition of their task has shown them to be acting upon mutually conflicting and wasteful policies.

A sound and progressive development of the function of teacher preparation in the future requires that it be conceived and administered consistently as one problem, that all of its phases be related to a single fully informed and competent executive authority; and that it be supervised by a representative body responsive to the will of the state and capable of interpreting its desires.

Altho the provision of properly selected and instructed teachers is much the weightiest item in a state's educational program, it is in itself but a part of the total educational problem. Rearrangements intended to furnish a sufficient supply of good teachers may therefore involve a readjustment of the entire educational administration with a view to securing an efficient scheme of organization.

With needs such as these in view, the Missouri institutions chiefly concerned have already embarked upon a plan of voluntary coopération which has effected many important improvements and promises many more. Pending fundamental readjustments, this movement should be allowed opportunity to mature.

It has been the purpose of this study, however, to reach as nearly as possible the root of existing weaknesses, and to suggest changes likely to correct them not only in Missouri but wherever they may be found. To this end, therefore, and not solely with the idea of formulating a possible program for Missouri, the proposals here summarized are offered. They group themselves naturally in two divisions: A. Conclusions and proposals having to do with the external organization and control of normal schools; and B. Conclusions and proposals relating to the internal organization and

procedure best suited to the preparation of teachers in state institutions of the normal school type.

A. CONCLUSIONS AND PROPOSALS RELATING TO EXTERNAL ORGANIZATION AND CONTROL

1. *Constitutional Modifications*¹ (see Chapter IV, C, page 63)

- a. The constitution should provide for a State Board of Education consisting of five members serving without pay, said board to be further determined and established by law. To this board the constitution should delegate full powers of government, control, and, thru its appointed officers, of administration of all educational institutions or departments of whatever nature for which state moneys or legislative appropriations are expended, together with the custodianship, regulation, and distribution of all state funds existing for educational purposes. It should be the further constitutional duty of said board to exercise general supervision over the entire educational system of the state; to see to the execution and enforcement throughout the state of all laws relating to education; to learn by competent inspection and to report to the legislature at each regular session concerning the conditions, progress, and needs of the people of the state in respect to education; and from time to time to frame for enactment into law proposals that shall meet the educational requirements as reported. Finally, it should be the constitutional duty of the board to serve as the agent of the state in all dealings with the federal government in which educational considerations or appropriations for education of any sort are involved.
- b. The present *ex-officio* Board of Education and the existing office of State Superintendent of Public Schools, together with all other provisions inconsistent with the above proposals, should be omitted from the constitution.

2. *Legislative Provisions* (see Chapter IV, B and C, pages 54 and 63)

- a. In accordance with the suggested amendments to the constitution there should be created a Board of Education of the character and for the purposes therein stated. The members of this board should be representative citizens not professionally engaged in education or interested directly in any educational institution; they should not be incumbents of any position in the pay of the state or otherwise a public trust; they should be elected at large or appointed by the governor, one member every two years for a term of ten years. The specific duties of this board should be as follows:
 - (1) To appoint an executive officer to be known as the Chancellor of the University, thru whom alone the board should control and administer the various institutions of the state constituting the university.
 - (2) To appoint, coördinate with the foregoing, an executive officer to be known as Commissioner of Elementary and Secondary Education, thru whom alone its oversight of elementary and secondary education should be conducted.

¹ Changes in the Missouri constitution are not indispensable to a successful organization of the agencies for preparing teachers. The normal schools may be incorporated with the state university by legal enactment, and the functions of a Board of Education may be discharged, so far as institutions are concerned, by the present Board of Curators. In that case the Superintendent of Public Schools would continue to be an elective officer, but should be a member of the proposed council of presidents.

- (3) To fix the salaries of its chief executives, and in event of the unsatisfactory performance of their duties, or of their failure to coöperate, to remove them.
- (4) To appoint upon nomination thru its chief executives respectively (in the Division of Education, on the original initiative of the divisional board of presidents), and upon their motion to remove, all officers, professors, instructors, deputies, inspectors, examiners, and other assistants necessary to the effective performance of the duties of the board and to the successful conduct of the institutions under their control, and to fix their salaries.
- (5) To arrive at its conclusions in all matters only after advising with its chief executives, who for this purpose shall be *ex-officiis* non-voting members of the board, and to give validity by its sanction to their approved proposals.
- (6) Thru its executive, the Chancellor of the University, to exercise complete oversight and control over all state-supported institutions in so far as they are engaged in any form of higher or adult education; in schools aided by the state, to exercise such oversight as may be necessary to safeguard the conditions upon which aid is granted.
- (7) Thru its executive, the Commissioner of Elementary and Secondary Education, to exercise a general supervision over the public school system of the state; to attend to the enforcement of all laws pertaining to public schools or to education in this field; to regulate completely the distribution of school funds; to classify schools; to establish uniform records and reports; to determine the qualifications of teachers, the amount and general character of their training, their certification for elementary, secondary, and special schools, and the recognition of certificates and diplomas from other states; to establish in coöperation with the State Board of Health standards for the construction, arrangement, and sanitary equipment of school buildings and school sites, and to direct the medical inspection and study of public health in so far as schools are concerned.
- (8) Thru its executives, jointly:
 - (a) To provide the necessary agencies both for the initial training of teachers and for their professional advancement in service, and to supervise their operation.
 - (b) To consider the interests and welfare of the whole body of teachers in the state and, if found desirable, to undertake the establishment of a retirement or pension fund for their benefit.
 - (c) To study the educational needs of the state and to take steps to provide adequate facilities for such training as may be considered advantageous.
 - (d) To give state-wide publicity to accurate and comprehensive information regarding the available educational facilities both within and without the state.
 - (e) To prepare and submit to each legislature a budget of expenditures for educational purposes during the ensuing biennium.
 - (f) To make an annual report to the governor of its acts, together with an

itemized account of expenditures of all state funds and appropriations for education.

- b. To make the foregoing provision effective, there should be transferred to the State Board of Education thus created, all the powers and duties of the present Board of Education and State Superintendent of Public Schools, of the Board of Curators of the university, of each of the six Boards of Regents of the state normal schools and of Lincoln Institute, of the boards now in charge of the state institutions for the blind, for the deaf and dumb, and of all other state-supported institutions in so far as the education of attendants or inmates is concerned.
- c. All laws inconsistent with the intent of the above recommended legislation should be repealed.

3. *Administrative Policies of the Board* (see Chapter IV, B, page 54)

- a. In view of the organization provided for above, all state-supported agencies for the preparation of teachers should become component units in the state's establishment for higher education—the university; their several directors should continue to function as presidents of their respective institutions. Even without the larger changes involving constitutional alteration, the incorporation of the normal schools as colleges within the organization of the state university would make possible most of the changes deemed desirable in this study.
- b. Such coördination accomplished, steps should be taken at once for bringing the whole problem of the preparation and supply of teachers under competent and unremitting study with a view to maintaining the various agencies at hand in constant adjustment to the needs of the state. For this purpose the several heads of institutions, together with the dean of the school of education at the university, should be constituted a permanent council of enquiry and administration for the preparation and supply of teachers. As authorized experts in that field it should be their business, in frequent sessions and subject to the approval of the Chancellor and Board of Education—
 - (1) To determine accurately, with the advice and assistance of the Commissioner of Elementary and Secondary Education, the number and character of the teachers needed to supply satisfactorily the public schools of Missouri, and to formulate proposals for the provision or adaptation of facilities to meet this need.
 - (2) To determine, with the coöperation and approval of their respective faculties, the nature and organization of the various curricula and courses necessary to furnish the kind and number of teachers desired; to assign the various types of work to different schools with a view to utilizing the available facilities to the best possible advantage.
 - (3) To agree upon all regulations and administrative procedure governing the different colleges and schools of education, and to provide for the effective execution of their conclusions; to determine the personnel of instruction and administration in the same, as well as successors to their own membership.

- (4) To prepare and submit to the Chancellor biennially a budget of expenditures for the preparation of teachers during the ensuing biennium.
- c. Of the organization just described the Chancellor of the University and the Commissioner of Elementary and Secondary Education would properly be members *ex-officiis*. The first would seek to maintain appropriate relations between the different forms of professional education—law, medicine, agriculture and so forth, and teaching; while the latter, as the responsible head of the service into which teachers go, would naturally be vitally concerned in their adequate preparation.

B. CONCLUSIONS AND PROPOSALS RELATING TO INTERNAL ORGANIZATION AND PROCEDURE

1. *Purpose and Scope of Normal School Effort* (see Chapter V, page 70)
 - a. It should be considered as a fundamental principle that state-supported agencies for preparing teachers should devote themselves exclusively and without reserve to that task.
 - b. The scope of the activities of any state-supported institution for preparing teachers should be determined invariably by a permanent authority representing all such undertakings within the state. The harmonious interrelationship of all teacher-preparing agencies in accordance with a careful and exhaustive canvass of the existing needs is the only proper guide in determining what kind of teachers any given school or department shall undertake to prepare.
2. *The Curricula*
 - a. Outstanding Problems of Curriculum Construction (see Chapter VII, A, page 128)
 - (1) The minimum standard of admission to all professional teaching curricula should be the requirement of graduation from an approved four-year secondary school, or its equivalent by examination; this standard should be fixed at once. Service as teacher in a public school without recognized professional training of collegiate character should be made impossible.
 - (2) A schedule of progressive increase in residence requirements should be established. The expressed goal of this program should be, in effect, an identical residence requirement for all public school teachers from the first to the twelfth grades, urban and rural alike, —a requirement of four school years of organized professional preparation of collegiate character.
 - (3) In order to make possible a standard admission and residence requirement for professional curricula in the case of women, the profession of teaching should be made attractive to them throughout the state as a permanent life career. Their marriage should not be considered as a bar to such service, but rather as an added qualification.
 - (4) After a brief period of orientation and self-discovery on common ground,

all professional curricula should, in the interests of the public service, have in view definitely distinguished positions, to the preparation for which their entire resources may contribute. In so far as formulated disciplines exist that clearly promote skill and power in the given position, the principle of free or group election should give place to prescriptive sequences prepared by experienced observers. In the longer curricula, where reasoned equivalence may be secured, or is a matter of indifference, option may be allowed, but the greatest possible effectiveness of the teacher in the position chosen should be the first consideration throughout.

- (5) The differentiation of curricula according to the position in view, a principle already partly recognized for primary and high school teachers, should be completely worked out, and should be applied as well to the middle and upper grades, and to the work of school administration.

b. Organization of Secondary Curricula for the Professional Preparation of Teachers (see Chapter VII, B, pages 164-166, 173-177)

- (1) As long as it is necessary to offer professional preparation for teaching to candidates of secondary grade, the professional courses should be concentrated in the fourth year, which should be completely devoted to them.
- (2) The principal emphasis in this year of professional study should be upon the subject-matter which the students are preparing to teach and upon participation in the actual work of elementary teaching. The "subject-matter" courses should include industrial arts, music, drawing, and elementary agriculture or agricultural nature study. The participation in teaching should extend throughout the year. It should involve carefully graded exercises in individual and group instruction in the schools of the community in which the training-class is located, and should include a period of not less than two weeks responsible teaching in a one-room school.
- (3) In addition to the work in subject-matter and in teaching, the student should have a course in elementary pedagogy including the simpler principles of educational psychology, a course in rural school management, and a course in rural life problems.
- (4) As soon as possible, the work of this fourth year should be transferred to the first collegiate year at a normal school, and thereafter expanded into longer curricula of two, three, and ultimately of four years for the professional preparation of rural school teachers.

c. Organization of Collegiate Curricula for the Professional Preparation of Teachers (see Chapter VII, B, page 161)

- (1) Curricula of collegiate grade that have for their purpose the preparation of teachers should be professionalized throughout in the sense that every course should be chosen with specific reference to the contribution that it makes to the teacher's equipment. This would, by definition, include courses of a distinctly "liberal" type (pages 166-172, 228-247).
- (2) The focal characteristic of every such curriculum should be participation in the actual work of teaching; consequently the training school should

be looked upon and administered as the central feature of the normal school organization (pages 192, 224).

- (3) No professional curriculum for teachers should look exclusively toward the development of specific *skill* in teaching. It should aim as well to make the teacher professionally intelligent: competent to coöperate in the construction of large educational plans and policies, or at least to measure the full significance of constructive proposals. This broader aim of ensuring professional intelligence will naturally receive greater emphasis in the longer curricula, but it should find a definite expression even in the briefest preparation (pages 179-182).
- (4) The so-called "professional" courses—psychology, the history of education, principles of teaching, school management, practice teaching, and the like—should be judged not only by the extent to which they increase specific skill in classroom procedure, but also by their contribution to the broader professional intelligence and insight of the teacher. In connection with the latter aim, the claims of biology, sociology, and economics should be considered as well as those of the professional courses now recognized as such (pages 179-182).
- (5) The sequence of professional work should represent a progression from the concrete courses that deal primarily with classroom procedure to the more abstract summarizing and systematic courses. The latter consequently will appear at or near the end, and will be elaborated most fully in the longer curricula (pages 183, 186, 189, 191, 224).
- (6) A general course in "pure" psychology is of doubtful value as an introduction to professional study. The introductory course should deal rather with the concrete applications of psychology to teaching (educational psychology), leaving the more abstract course in psychology until later. All courses should exemplify and expressly emphasize the psychological principles which they involve (pages 182, 183).
- (7) A general course in the history of education is probably out of place in one-year or two-year curricula. Such a course, however, should serve an important purpose in one of the later years of the longer curricula. Most courses would gain both in force and coherence by briefly tracing the development in their own practice. These partial glimpses should then be gathered firmly into a complete picture by a systematic course in educational development as a whole (pages 184-187).
- (8) The courses generally known as principles of teaching (general method) and school management will yield the best results if associated closely with the work in participation and practice teaching (pages 189, 191).
- (9) As far as possible, the distinction between courses in "special methods of teaching" and courses in the subject-matter itself should be eliminated. Every professional curriculum should embody thorough courses of distinctly collegiate character in all of the subject-matter that the student proposes to teach. In these courses the specific organization of materials for elementary or secondary teaching should be fully discussed, and the approved methods of teaching should be both exemplified and justified.

All teachers of the so-called academic subjects should hold a direct and responsible relationship to the training school (pages 199–202, 227).

- (10) In each specific curriculum, a course that aims to organize and integrate the work of that field for which the curriculum prepares (primary teaching, intermediate grade teaching, junior high school teaching, and so forth) should be offered in the final year (pages 224, 227).
- (11) The importance of the training school in the scheme of curriculum construction above outlined suggests —
 - (a) Much more extensive training-school facilities than most normal schools now provide; intimate and to some extent controlling relations should be developed with the local public school system (pages 192–197).
 - (b) Control by the normal school of the principal school or schools in which students serve as teachers for practice. This should not preclude a supplementary use of other schools for apprentice-teaching (page 193).
 - (c) A recognition of the status of the supervisor and critic teacher as equal or superior to that of the “academic” teacher (page 213).
 - (d) The unification of the headship of the education department with the direction of the training school and of practice teaching in one person.
 - (e) The safeguarding of the interests of training-school pupils by permitting not more than three-fourths and preferably not more than one-half of the teaching to be done by student-teachers (page 194).
 - (f) The provision of a separate school for experimental purposes, and the limitation of the training school to practice teaching and teaching for purposes of demonstration (page 221).
 - (g) The employment of teachers of educational theory and teachers of “academic” subjects as supervisors of teaching under the general control of the director of training (page 202).
 - (h) A systematic gradation of the work in observation, participation, group-teaching, and responsible room-teaching (pages 224, 225).
- (12) In each collegiate curriculum of two years or more, a term or a semester should be left after the period of responsible room-teaching, for the summarizing courses mentioned above (pages 183, 224).
- (13) Each prescribed professional curriculum should have in view the symmetrical development of an individual’s knowledge and skill as required for an analyzed purpose. It is not a mere series of independent courses juxtaposed by title. It is rather one complex, carefully devised tool operated by different instructors to a common end. Its success depends upon the extent to which these instructors, by constant study, conference, and mutual criticism, learn to reënforce and supplement each other in the content of their teaching. Differences should be worked out in advance or omitted. Each curriculum should constitute a harmoniously interrelated body of instruction progressively directed toward a definite result that is clearly understood by all.

d. Quality of Normal School Instruction as a Factor in the Curriculum:

- (1) The actual teaching by normal school instructors should be looked upon as an essential part of the professional curricula (page 247).
- (2) For exemplary effect, every effort should be made to ensure the conditions that will result in superior teaching upon the part of normal school instructors (pages 249-255).
 - (a) Provision for the study and criticism of class instruction in the normal schools should be devised and put into operation. This would probably be best accomplished by a special adviser serving his fellow instructors in the relation of a colleague, or thru a changing committee of leading instructors (pages 255-257).

c. Selection and Distribution of Curricula (pages 258-265).

- (1) The present administration of the curricula in the Missouri normal schools is wasteful and ineffective, due to duplication of classes, to an extravagant elective system, and to the complete lack of the intercollegiate differentiation of specialized curricula. Differentiation and concentration of prescribed curricula in accordance with the previously ascertained needs of the state are suitable remedies for the existing situation.

3. *Staff of Instruction* (see Chapter VI, A, page 99; Chapter VIII, A, page 272)

a. The Presidents (pages 273-276).

- (1) The normal school is weakened by the excessive prerogative now vested in its president. Such powers as are now exercised by him should be shared partly with a strengthened faculty, partly with other presidents in coöperative direction of all the teacher-training agencies of the state.

b. The Teachers (pages 99-116, 276-292).

- (1) Normal school instructors should be transformed into a true "faculty" by classifying them according to merit and service, and by allowing them the exercise of influence characteristic of faculties in good higher institutions in determining the educational policy of the school. They should be absolutely relieved of clerical and administrative duties (page 276).
- (2) Their training should conform to collegiate standards, and as these are approximated, their formal hours of class work should be correspondingly diminished and concentrated, their salaries should be much increased, and their tenure of position should be made permanent (pages 105, 110, 114, 280).
- (3) Excellence of general education and of professional training and experience should be particularly required of instructors in education, of supervisors of practice teaching, and of critic teachers; these should be the dominant personal elements in any normal school faculty (page 283).
- (4) For the sake of teachers in service the summer session should be well staffed with competent and experienced instructors. They should be as well paid as teachers in the regular session. Student assistants are not desirable as instructors in professional institutions for the preparation of teachers (pages 286-292).

4. *The Student Body* (see Chapter VI, B, page 117; Chapter VIII, B, page 292).
- a. The conscious effort to attract or to retain men students in normal schools at a sacrifice of a clear aim and of an intensive organization of work is not in the best interests of the service (pages 292-295).
 - b. The secondary instruction offered in the normal schools should be abandoned; young pupils should be returned to the high schools for preparation, and state-supported high schools, with organization wholly separate from that of the normal schools, should be provided for older, belated students (page 295).
 - c. Concessions to irregular attendants have seriously hampered the proper work of the schools and should not continue. Coöperation among the schools in the adoption of prescribed curricula requiring continuous attendance would prove greatly to the advantage both of the student and of the service (page 305).
 - d. Admission to the normal schools should depend on either a credential issued by the state authority for the inspection and approval of secondary schools, or an adequate examination (page 312).
 - e. The tendency to excessive student programs would be most effectually remedied by resorting to fixed curricula based, not on the number of hours or points, but on the successful completion of a certain series of courses taken in a definite combination and sequence (pages 317-320).
 - f. Fully to serve its purpose, the normal school should seek to become a selective institution. In determining the degrees of student attainment the relaxation or abandonment of thorough examination without the development of other more accurate and effective methods of measurement is a mistake. "Sizing up" on the part of the instructor can scarcely be considered satisfactory (page 326).
 - g. The maintenance of accurate, significant records of student work is essential for the moral health of the institution. The administration of credit should be in the hands of disinterested officers acting in accordance with regulations and policies established either by faculty action, or preferably by the joint action of all responsible authorities of teacher-training institutions (page 342).
 - h. (1) Graduation should mark the natural terminus in a symmetrically organized course of training, rather than the achievement of a given number of unrelated credits (page 344).
 - (2) Certification should be a matter not of statute but of carefully planned administration on the part of the state commissioner of education in coöperation with the training institutions. It should depend not only on initial study and examination, but also on competent scrutiny of ability and growth in service (pages 346-348).
 - (3) Appointments to positions should involve a clearer and more specific knowledge and record both of the candidate and of the proposed position than are at present attempted. To accomplish this the normal school should undertake to establish more intimate and responsible relations with its dependent schools than now exist. The institution's obligations are not fully discharged until a properly prepared teacher is successfully at work.

- i. The administrative practices of an institution, like the patterns of instruction set by its staff, are as vital elements in curricula as are any formal courses; they should be models of good judgment and skilful planning because of their inevitable and powerful influence upon the ideals of prospective teachers (pages 353, 354).

APPENDIX

§ I. COLLECTION AND TREATMENT OF DATA

THE specific evidence on which the conclusions recorded in the foregoing pages are based has usually been described briefly when cited. For purposes of convenient reference in considering the tables that follow, a general account of these sources, both those of a statistical nature and others of a personal character, is given here.

A. THE NORMAL SCHOOLS

1. Each permanent teacher in a normal school or city training school was asked to fill out a comprehensive questionnaire covering, besides certain personal facts, a large number of significant items in his training, experience, and present service. With few exceptions all teachers regularly connected with these institutions in the spring of 1915 returned replies.¹ See pages 419 ff.

2. Special instructors engaged only for the summer of 1916 were studied as a separate group. For these the essential facts were furnished, not by the individuals themselves, but by the school authorities. Eighty-one special teachers were thus reported upon; the data regarding thirteen others could not be secured. See pages 426, 427.

3. Normal school teachers made a further contribution of exceptional value. After the preliminary field work of the study had been finished, and the main problems involved had become clearly defined, a folder was prepared with a view to eliciting the judgment of the teachers on these questions. Participation in this symposium, altho wholly voluntary, was very general, and the answers received were highly illuminating.

Similarly sheets were issued giving opportunity for a full analysis and description of each course taught by the teacher. Like the folders just described, the filling of these course sheets involved much painstaking labor on the part of the instructor. Nevertheless, they were returned in such numbers and with such careful detail as to provide an unquestionably reliable description not only of the present procedure but of the needs and difficulties with which the representative normal school teacher in Missouri is at present confronted. In all one hundred eleven teachers, or well over half of the total number, supplied these critical comments, and provided detailed analyses of about four hundred separate courses. The names of the teachers who rendered this important service to the study are as follows:

KIRKSVILLE

J. L. Biggerstaff
W. J. Bray
Mark Burroughs
W. A. Clark
Byron Cosby
Laurie Doolittle
Blanche F. Emery
Clarice Evans
Eugene Fair
D. R. Gebhart

Johannes Goetze
T. Jennie Green
Edna Hays
J. M. Heyd
Harriet Howard
C. R. Jaccard
G. H. Jamison
Ida A. Jewett
Warren Jones

Genevieve Kirkbride
Florence M. Lane
Grace Lyle
Ralph Noyer
Lena Patterson
Eudora Helen Savage
A. P. Settle
C. M. Wise
William H. Zeigel

WARRENSBURG

C. E. Ayres
Lucy Austin Ball
Myrtel Casebolt

V. C. Coulter
H. G. Ellis
R. A. Gantz

Noble Lee Garrison
Annie G. Harris
M. B. Harwood

¹ Kirksville, Springfield, and Harris Teachers College were fully complete; at Maryville one instructor in music, at Cape Girardeau one instructor in agriculture and two in music, and at Warrensburg two assistants in physical education, one in mathematics, one intermediate grade supervisor, and the former president failed to reply.

WARRENSBURG (*continued*)

Clara Hinsdell
M. L. James
Mary A. Kennedy
Lura L. Lemmon

C. F. Martin
W. W. Parker
C. A. Phillips
B. A. Pratt

H. Pryor
Mabel M. Richards
William Solomon

CAPE GIRARDEAU

Seth Babcock
L. E. Brucher
Walter F. Cobb
Fred H. Doeden
R. S. Douglas
J. A. Dunn
Mrs. Elma Ealy
E. A. Hayden
B. F. Johnson
Sadie T. Kent

Ida M. Knepper
Myrtle Knepper
Charles Lamb
J. C. Logan
A. C. Magill
H. Marston
W. W. Martin
H. S. Moore
Minnie M. Newman
Jeptha Riggs

A. D. Schuessler
Frances A. Shambaugh
Martha Shea
Ida M. Shilling
J. M. Sitze
Afton Smith
A. W. Vaughan
Emily Wilburn
Natalie Wilson

SPRINGFIELD

Virginia J. Craig
Mary Davis
Elizabeth Faulkner
C. B. Gentry
Clyde Hill
Estelle Hinton
Christiana Hyatt
Theo. W. H. Irion

D. T. Kizer
Adah Lewis
C. E. Marston
Louise Nixon
M. A. O'Rear
W. J. Osburn
Sue S. Perkins
S. J. Phelps

Romaine Roach
James W. Shannon
Blanche Skinner
A. P. Temple
Lewis F. Thomas
F. F. Thompson
T. J. Walker
Mary A. Woods

MARYVILLE

Beulah Brunner
T. H. Cook
S. E. Davis

C. A. Hawkins
H. A. Miller
Mildred Miller

George Palfreyman
F. P. Wagg
M. W. Wilson

HARRIS TEACHERS COLLEGE

Genevieve Apgar
J. Andrew Drushel

Charles M. Gill
E. George Payne

Laura J. Soper

On still another blank the teachers listed their literary productions, such as books, pamphlets, magazine and newspaper articles, and so forth.

Much helpful information was procured from the presidents of the institutions. The authors are especially indebted to President W. S. Dearmont, of Cape Girardeau, for the contribution of a thoughtful and suggestive review of the whole situation.

4. The student body as a whole was studied on the basis of the complete enrolment at each school during the full year previous to the beginning of the enquiry, that is, during the school year 1913-14. All the information available at each school concerning this mass of over seven thousand students was carefully brought together and tabulated. As a result, the main facts of parentage and paternal occupation, geographical distribution, previous schooling and teaching experience, dates and duration of local attendance, character and weight of program, amount and nature of credit earned, together with manifold incidental items of interest came clearly to view. Owing to the homogeneous character of the student body at Harris Teachers College, this analysis was omitted there. See pages 428, 429.

5. The schools' records of their former students were in most cases very meagre. It was consequently necessary to supplement these by applying directly to the students in attendance at the time when the schools were visited in the spring, summer, and fall of 1915. In this way information as to nationality, father's income, size and education of family, early schooling, vocational motive and intention, self-help, judg-

ments as to effectiveness of normal school training, and some other important phases of student life was secured. Altho this enquiry did not reach the total enrolment at any school, even for the term for which it was taken, it supplied the facts for between two and three thousand representative students, and appeared to offer a secure basis for generalization. The proportions of the current attendance at the various schools that furnished usable replies to the questions asked were as follows: Kirksville, 70 per cent (558); Warrensburg, 94 per cent (626); Cape Girardeau, 83 per cent (539); Springfield, 56 per cent (471); and Maryville, 90 per cent (259); all schools, 76 per cent (men, 785; women, 1668; total, 2453). See pages 429 ff.

It was not at first intended to put these questions at Harris Teachers College; cards were finally distributed, however, at a single gathering of students. Without further following-up, replies were thus secured from seventy-one per cent (109) of the total attendance.

The progress of this analysis of the student body from point to point revealed fresh possibilities; hence certain tables, as indicated thereon, actually apply to only part of the institutions, altho they are probably representative of all.

6. Study of the administrative procedure within the institutions was facilitated by a record of the class work of one full year—1915-16—procured from each school. On a separate sheet there was recorded for each individual who gave any form of instruction during the year, the name and date of each term-course taught, its location in the curriculum, its value in hours and credit, the student ratings reported in it, and the monthly and annual salary of the teacher giving it. With trivial exceptions, every item of instruction during the year in question was thus reported either by the registrars or by competent clerks approved by the school authorities. See pages 423-425, 436.

7. The composition of classes was examined by means of a special blank laid before the members of representative classes in each department. This blank brought together such facts concerning age, previous training, experience, and teaching purpose, as would be important in the proper classification of students. All told, some three hundred twenty-five representative classes, distributed among the various schools, were thus analyzed.

8. The student ratings in all classes for the entire school year, 1913-14, were assembled and studied with a view to determining the extent to which the schools exercised a selective function among their students. This material permitted likewise a comparison of the different departments and schools with a similar purpose. See page 435.

The collegiate ratings of students prepared largely at the normal schools were compared with those of students coming from high schools in order to ascertain which type of student proved most successful in normal school studies. The records of some four hundred students were examined with the results indicated on page 122.

9. To supplement the findings as to current procedure in the schools, it proved desirable to trace the records of some random group of students throughout their school careers. For this purpose the school histories of the most recent groups of graduates were worked out completely on a form showing the development, duration, and sequence of their curricula. Here appeared likewise the credit allowed for preparatory credentials, for advanced standing earned at other higher institutions, and special allowances made on various other considerations. All of these items were either compiled or checked up from the original entries, where these still existed, and the longer records that seemed to possess special significance were referred to the students

concerned for verification and comment. In all, four hundred fifty-eight student records from the five schools were worked out in this manner and given careful study. The standardized curricula and procedure at Harris Teachers College made such investigation there unnecessary. See pages 411 ff.

10. Light was sought on the quality of students attending the normal schools thru enquiries addressed to principals of high schools from which they came. One hundred eighty officers in as many different high schools responded by rating their graduates both in studies and in personal qualities, indicating therewith the subsequent occupation of the student, whether at work in college, normal school, business, or teaching, or unemployed. See pages 121, 122.

11. In the study of the curriculum an effort was made to ascertain from teachers in service the features of their training that appeared to them, in the light of subsequent experience, to have been of the greatest practical benefit. This line of enquiry was not developed as fully as would probably have been justified by the results. Replies were secured from one hundred sixty-three teachers—graduates of the schools under examination. See page 442.

12. Owing to the central importance of the training department in a normal school, it was felt that any study that omitted a careful application of the best known tests of school achievement to these institutions would partially fail of its purpose. Accordingly Professor Dearborn of Harvard University with five trained assistants visited the schools in May, July, and October of 1916, and gave a series of such tests as have proved most reliable. Because of the small size of some of these departments and their constituent classes, the results were not always completely satisfactory; they were, however, the best that could be procured under the circumstances. See pages 443 ff.

13. Altho no pains were spared to guide and verify conclusions by means of the statistical evidence described above, the study placed far greater dependence upon the personal contact of its staff with the schools themselves and with the conditions surrounding their work. The director of the enquiry was in the state with his assistants on seven different occasions for a total of nearly nine months, and Dr. Bagley, who studied chiefly the curricula and the teaching, was there for two months. Drs. McMurry and Strayer supplemented earlier familiarity with the field by fresh visits lasting together several weeks. The procedure was wholly informal; it involved visits and careful notes in many classes; countless interviews at free hours with teachers and officers both alone and in groups, as well as frequent conversations with students, alumni, and board members not only at the school but in their home towns. The problems confronting the normal schools in their several districts were studied by visits to the remoter portions of the state, as well as by prolonged interviews with county superintendents, occasionally supplemented by a visit with them to the schools under their supervision. The superintendents of the twenty-five largest towns and cities in the state were similarly interviewed in person, and the problem of teacher-training and supply was discussed from their varying points of view.

TREATMENT OF DATA

The statistical material gathered from the normal schools alone constituted a bulk of over fifteen thousand separate blanks and questionnaires, many of them of considerable length and of a complex character not adapted to tabulating machines. Plain transcription of data and occasionally simple reckoning was done at the schools by competent students recommended by the school authorities for the purpose, under the supervision of a specially trained assistant from the Foundation. Data showing the

composition of classes were worked up in the department of Education at the University of Illinois, and the judgments of teachers on the comparative value of their training courses were analyzed at Teachers College, New York. Otherwise the material was handled at the offices of the Foundation. A force of assistants first went rapidly thru the entire mass of replies; results that for any reason appeared to have no value or to be untrustworthy were then discarded, and the remainder were finally revised and checked, often repeatedly, with the utmost care. Wherever applicable these data have supplied the basis for the statements made in the text, and a small portion of them appear in the following pages.

While the Appendix was in preparation the body of the report was submitted as a whole in confidential form to the heads of each of the institutions concerned, and also to the president of the state university, with a request for criticisms or corrections in statements of fact. Corrections of this nature that proved to be well founded have been incorporated in the text.

B. THE TEACHING POPULATION

The census of the teaching population of Missouri was undertaken as a special enterprise to be related as a whole to the complete exposition of the state's agencies for preparing teachers. In the present treatment of the five state normal schools and a city training school, it has only a partial, albeit an exceedingly important, significance. Comprehensive blanks, with differences appropriate to the various classes of workers, were issued to all of the teachers and school officers in the state. To these requests for information approximately eighty-three per cent of the more than nineteen thousand teachers and school officers in the state in 1915 replied. In the several classes of teachers the returns were as follows:

	<i>Existing</i>	<i>Reporting</i>	<i>Proportion</i> %
Teachers in rural schools and of more than three grades elsewhere	10,515	8,277	79
Teachers in graded elementary schools outside of St. Louis and Kansas City	3,650	2,993	82
Teachers in elementary schools in St. Louis	1,789	1,560	87
Teachers in elementary schools in Kansas City	779	737	96
Elementary school principals, St. Louis	92	77	84
Elementary school principals, Kansas City	61	51	84
Teachers in classified high schools outside of St. Louis and Kansas City	1,164	1,074	92
Teachers in high schools in St. Louis	343	329	96
Teachers in high schools in Kansas City	246	239	98
City and town superintendents	538	444	83
County superintendents	114	114	100
<i>Total</i>	19,290	15,895	83

By the use of these data it has been possible to work out an approximately accurate estimate of the number of new teachers required in a given year, and to determine their source, age, and training. Furthermore, the present contribution of each school to the preparation of teachers for the state, both in kind and number, appears clearly. These facts are accurate for a single year only, but with such numbers they are undoubtedly representative of the general situation, and are sufficiently complete to illustrate well the data that should be constantly available in a well-managed state department.

The material thus brought together was analyzed and partially interpreted at the statistical offices maintained by the Foundation, during the progress of the study, at Lawrence, Kansas, under the direction of Mr. Homer W. Josselyn. For the needs of the present volume having to do with the normal schools, the required results were elaborated chiefly at New York.

§II. CURRICULA

TABLE 1. COLLEGIATE COURSES OFFERED IN MISSOURI STATE NORMAL SCHOOLS, 1917-18¹

<i>Education.</i>	<i>Kirks- Warrens-</i>		<i>C. Gir- Spring- Mary-</i>		<i>Kirks- Warrens-</i>		<i>C. Gir- Spring- Mary-</i>	
	<i>ville</i>	<i>burg</i>	<i>ardeau</i>	<i>field</i>	<i>ville</i>	<i>burg</i>	<i>ardeau</i>	<i>field</i>
History of philosophy	4				45	70	70	46
Logic	4				7.5	7.5 ^a	6	5
Ethics	2.5	2.5	2.5	5		7.5		2.5
Psychology	6		5					2.5
Educational psychology	2.5							2.5
Experimental psychology	2.5							2.5
Child psychology	2							2.5
Adolescent psychology	4							2.5
Principles of education	2.5	2.5	2.5	5				2.5
Principles of teaching	2.5	2.5	2.5	5				2.5
Sociology	2.5	2.5	2.5	5				2.5
Educational sociology	2.5	2.5	2.5	5				2.5
Rural sociology	2.5	2.5	2.5	5				2.5
Child welfare	2.5	2.5	2.5	5				2.5
Vocational guidance	2.5	2.5	2.5	5				2.5
School economy	2.5	2.5	2.5	5				2.5
School administration	2.5	2.5	2.5	5				2.5
Supervision of instruction	2.5 ^a	2.5	2.5	5				2.5
Tests, measures, etc.	2.5	1.2	2.5	5				2.5
History of education	7.5	7.5	5	5				2.5
History of education in Missouri	1.3							2.5
Modern school systems	2.5	2.5	2.5	5				2.5
Rural education	2.5	2.5	2.5	5				2.5
Rural school administration	2.5 ^a	2.5	2.5	5				2.5
Elementary course of study	2.5	2.5	2.5	5				2.5
Kindergarten and primary methods	6	15	8	7.5				2.5
Intermediate grade methods	2.5							2.5
Folk lore	2.5							2.5
High school problems	2.5	2.5	2.5	5				2.5
Observation	4							2.5
Practice teaching in rural schools	2.5	2.5	2.5	5				2.5
Kindergarten and primary teaching	7.5							2.5

¹ Courses listed at Maryville are for 1916-17.
² Credit to be arranged. This course does not appear in the Total.
³ The amount of credit was not stated in the catalogue. Full credit is assumed.
⁴ "Secondary course of study."
⁵ Secondary credit, $\frac{1}{2}$ unit, may be allowed for 2.5 semester hours of this course.
⁶ Teaching courses are listed and counted in their respective departments, e.g., for "Teaching of Arithmetic" see Mathematics.
⁷ Secondary credit of $\frac{1}{2}$ unit for teaching courses in elementary subjects is partly included in 2 units of secondary education and partly listed under various subjects.
⁸ The computations take no account of teachers' courses in English and reading and courses in juvenile literature that are offered in some of the normal schools outside of the English department.

TABLE 1 (continued). COLLEGIATE COURSES OFFERED IN MISSOURI STATE NORMAL SCHOOLS, 1917-18

	Kirks- ville		C. Gir- ardeau		Warrens- burg		Kirks- ville		Warrens- burg		C. Gir- ardeau		Spring- field		Mary- ville	
<i>Ancient Lang.</i> : brought forward	5	10	10	10	5		5		5		5		10		12.5	7.5
Ovid	2.5						2.5						10		2.5	7.5
Virgil	5	7.5	6	6	7.5		7.5						10		2	7.5
Sallust	2.5	2.5													6	15
Livy	2.5				5		5						7.5	8.7		
Horace	5		6	2.5	7.5		7.5					2	7.5	2.5	2	
Cicero, essays, letters	5	5		2.5	7.5		7.5						7.5			
Plautus	2.5			2.5			2.5						2.5			
Terence	2.5		6		2.5		2.5						7.5			
Tacitus	2.5	5		2.5										2.5		
Seneca	2.5													2.5		
Pliny, Horace, Tacitus			6										7.5			
Latin comedy				2.5											6	2.5
Roman historical literature				5											6	
Elegiac poets			6													
Roman poets				2.5												
Epigrams of Martial		4		2.5 ¹												
Word study	2.5		4	2.5												
Roman life, customs		4		2.5												
History of Latin literature		6														
Roman philosophy		6														
Mythology				2.5 ¹												
Teaching of Latin	2.5	5	1.3	2.5	2.5 ²											
Advanced course in Caesar					5											
1st year Greek		6														
Xenophon, Lysias		6														
Homer, Herodotus, Demosthenes		6														
Thucydides, Aeschylus, Sophocles		6														
Greek life and customs		2														
Greek literature, translations		4														
Total collegiate semester hours	42.5	35	91.3	42.5	47.5											
Secondary units offered	2	2	3	2½	3											
<i>Modern Foreign Languages:</i>																
Teaching of modern foreign languages	2.5	2.5	.7	2.5												
German (general course)	7.5	7.5 ⁴	6 ⁵	10	7.5											

¹ May be taken for secondary credit, substituting for Caesar.² Includes teaching modern foreign languages.³ See Latin: "Teaching foreign languages."⁴ May be taken for secondary credit, 1 unit.⁵ This course apparently may be taken for secondary credit.⁶ More advanced courses will be given in French if there is sufficient demand.⁷ May be taken for collegiate credit—15 semester hours.⁸ Not including 7.5 semester hours of 18th century history not given in 1917-18.

TABLE 1 (continued). COLLEGIATE COURSES OFFERED IN MISSOURI STATE NORMAL SCHOOLS, 1917-18

	Kirks- ville	Warrens- burg	C. Gir- ardeau	Spring- field	Mary- ville
<i>Agriculture:</i>					
Farm crops	7.5	5	2	5	5
Dairying	7.5	2.5	2	2.5	2.5
Soils	5	2.5	2	2.5	2.5
Live stock	5	2	2	2.5	2.5
Stock judging		2.5	2		
Poultry	2.5	2.5	2	2.5	2.5
Gardening (school)	2.5		2.5		
Horticulture	2.5				
Concrete construction	2.5		2.5		
Teaching of agriculture	2.5		2.5		
Feeds and feeding	2.5	2.5		2.5	2.5
Farm management	2.5	2.5	2	2.5	2.5
Principles of breeding	2.5	2.5	2		
Fruit production		2.5	2	2.5	2.5
Bacteriology ¹		2.5			
Rural economics			2		
Total collegiate semester hours	45	27.5	20	25	20
Secondary units offered	1	1½	1½	1	1½
<i>Fine Arts:</i>					
Teaching of fine arts	2.5	2.5	1	2.5	7.5
General art	3.7				
Drawing, perspective	7.5	1.3	1	5 ²	
Sketching	2.5	1.3			
Design	7.5	1.2	1	5	
Costume history and design	2.5	2.5			2.5
Art history		5	2		
Art appreciation	7.5	2.5			
Advanced composition and illustration	2.5		1		
Clay modeling, pottery	5				
China painting	7.5				
House decoration	2.5	2.5			
Advanced drawing		3.7	1		
Commercial design		2.5			
Special problems		2.5			
Advanced bookbinding		2.5			
Pen-and-ink sketching		2.5			
Painting in water colors			1	7.5	
¹ Bacteriology is given under other departments in the other normal schools.					
² See manual arts (course 58) for 1.3 semester hours of drawing.					
<i>Fine Arts: brought forward</i>					
Oil painting					
Crayola					
Art structure					
Decorative art					
Drawing and painting					
Total collegiate semester hours	51.2	32.5	8	22.5	7.5
Secondary units offered	½	1½	¾		¾
<i>Music:</i>					
Sight reading (vocal music)	7.5	2.5			
Harmony	7.5	10	4		7.5
Counterpoint	5	2.5	4		
Form	5	2.5			5
Instrumentation	5	2.5			
Orchestration	2.5	2.5			
History of music	2.5	5	4		2.5
Biography of musicians	2.5				
Chorus	1.3	2.5 ^a	4	2.5	
Orchestra	1.3	2.5 ^a			
Glee club		2.5 ^a			
Vocal lessons	1.2	2.5 ^a	4	30	
Appreciation of music		1.3	7		
Piano		2.5 ^a	4		
Violin		2.5 ^a			
Public school music					
Teaching of music	7.5	5	3	10 ^b	2.5
Total collegiate semester hours:	48.8	48.8	11.7	85	7.5
Secondary units offered	1 ⁷	½	4		25
<i>Commercial subjects:</i>					
Accounting					
Farm accounts	7.5	7.5	9	5	7.5
Typewriting		3.7	2	2.5	

³ May be taken for one semester hour of collegiate credit.⁴ Tuition is charged for work of high school grade is indicated in the catalogue. Four years of work of high school grade is offered in piano. Work of collegiate grade is offered as follows: piano, five years; violin, four years; voice, three years (two lessons a week), harmony, three years.⁵ These courses may be taken by high school pupils.⁶ Work in harmony, form, etc., is included in these courses.⁷ Catalogue did not indicate credit; full credit has been assumed.

TABLE 1 (concluded). COLLEGIATE COURSES OFFERED IN MISSOURI STATE NORMAL SCHOOLS, 1917-18

	Kirks- ville	Warrens- burg	C. Gir- ardeau	Spring- field	Mary- ville
<i>Commercial Subjects</i> - brought forward					
Stenography	7.5	11.2	11	7.5	11.2
Penmanship	7.5	10	6	6	10
Commercial English		2.5	3	5	2.5
Commercial arithmetic		2.5	2		
Commercial geography	7.5		4	2.5 ¹	
Commercial law			4		2.5
Office training	2.5		2		
Teaching of commerce	2.5		2		
Total collegiate semester hours	27.5	28.2	34	15	38
Secondary units offered	14 ²	8			
<i>Industrial Arts:</i>					
Industrial arts	7.5				
Woodworking	3.8	6		7.5	1.3
Furniture construction	3.8	3	3		5
Mechanical drawing	3.8	5	3		5
Woodturning	1.3		1		2.5
Pattern making	1.2	1.3			
Woodturning and pattern making			6		
Machine design	1.2				
Architectural drafting	1.2	5	3		1.2
Forge work	1.2	3	6		
Carpentry, housebuilding		5			2.5
Sheet metal work		1.3			
Machine shop work		5			
Concrete and cement		1.2			
Industrial arts design		2.5			
Primary handwork			3	7.5	
Grade handwork and benchwork			3	5	
Art crafts				12.5	
Teaching manual arts	2.5	7.5			2.5
Total collegiate semester hours	27.5	41.8	28	32.5	22.5
Secondary units offered	14	18 ⁴	4		
<i>Home economics:</i>					
Sewing	2.5	5	3		7.5
Dressmaking	5	7.5	3		5
Costume history and design	2.5				
Textiles	2.5	2.5	2		
Millinery	2.5	2.5	1		2.5
Art needlework			1		
Food preparation	7.5	5	5		15
Experimental cooking, home cooking			6		
Home nursing	2.5				
Home problems	2.5		1		2.5
Household management	2.5	2.5	2		2.5
Dietetics	7.5	2.5	2		
Selection of foods		5			
Home construction	2.5				
Home decoration			2		
Teaching of home economics	2.5	2.5			7.5
Total collegiate semester hours	40.0	35.0	29.7	27.5	35
Secondary units offered	3	24	4	14	
<i>Library economy:</i>					
Elementary library practice					8
Library economy	7.5		2		1.2
Library methods			2		
Library organization			4		1.2
Total collegiate semester hours	7.5				
<i>Physical training:</i>					
Physical training	11.3	5 ⁷	8		3.8 ⁸
Organized play, games, etc.	3.8	5	2		2.5
Anatomy		7.5			
Theory of gymnastics			(1)		
Hygiene			(2)		
Emergencies and massage					
Theory of teaching physical education	3.7	1.3 ¹⁰	1		2.5
Total collegiate semester hours	18.8	17.5	5	8.8	10
Secondary units offered	14	4	3		

¹ One and one-fourth hours credit for a year's work.² No credit for physical practice.³ Not more than 2.5 semester hours given for physical training.⁴ No record of credit for this course, probably 1.3 semester hours.¹ Listed in catalogue under "Science."² One unit of typewriting may be taken for college credit, 7.5 semester hours.³ Secondary 3 unit may be taken for 5 semester hours of college credit.⁴ One and two-thirds units may be taken for college credit, 12.5 semester hours.⁵ Home decoration is listed at Kirksville under "Fine Arts."⁶ Required of all new students without credit, "one hour time for two weeks."

TABLE 2. COLLEGIATE OFFERINGS IN VARIOUS NORMAL SCHOOL DEPARTMENTS, 1917-18

	KIRKSVILLE		WARRENSBURG		C. GIRARDEAU		SPRINGFIELD		MARYVILLE		Av.	Extreme
	Teach- ers	Sem. Hours	Teach- ers	Sem. Hours	Teach- ers	Sem. Hours	Teach- ers	Sem. Hours	Teach- ers	Sem. Hours	Sem. Hours	Var. Sem. Hours
Education	9 ¹	52.5	12	87.5	11	76	10	55	6	52.5	64.7	35
English	5	70	5	80	4	79.3	5	45	3	60	66.9	35
Ancient Languages	1	42.5	1	35	1	91.3	2	42.5	1	47.5	51.8	56.3
Modern Foreign Languages	2	57.5	1	46.2	1	52.7	2	40	1	32.5	45.8	25
History and Political and Social Science	6	100	5	70	3	56	4	37.5	3	50	62.7	62.5
Mathematics	4	37.5	3	32.5	2	22	1	32.5	3	25	29.9	15.5
Physics and Chemistry	2	47.5	3	37.5	2	32	1	15	1	32.5	32.9	32.5
Biological Sciences	2	12.5	3	25	1	22	1	15	1	20	18.9	10
Geography, Physiography	1	12.5	3	5	1	4	1	7.5	1	17.5	9.3	13.5
Agriculture	2	45	3	27.5	1	20	1	25	1	20	27.5	25
Fine Arts	2	51.2	2	32.5	2	8	1	22.5	1	35	29.8	43.2
Music	4	48.8	4	48.8	5	11.7	5	85	1	25	43.9	73.3
Commerce	2	27.5	1	26.2	1	34	1	15	1	30	26.5	19
Industrial Arts	2	27.5	1	41.8	1	28	1	32.5	2	22.5	30.5	19.3
Home Economics	2	40	2	35	2	29.7	1	27.5	1	35	33.4	12.5
Library Economy	—	7.5	—	—	—	4	—	—	—	1.2	2.5	6.3
Physical Training	2	18.8	2	17.5	2	5	2	8.8	3	10	12	13.8
Total	48	698.8	51	648	40	576.7	39	506.3	30	516.2	589	192.5
Ratio ²		14.6		12.7		14.4		13		17.2		

TABLE 3. INDIVIDUAL CURRICULA ILLUSTRATIVE OF THE OPERATION OF THE ELECTIVE SYSTEM IN MISSOURI NORMAL SCHOOLS

CASE 1. This is a fairly good example of an individual curriculum based upon a group-requirement system. There are appropriate sequences in courses that rigorously demand suitable prerequisites, such as mathematics and chemistry, but not elsewhere; the practice teaching, necessarily limited to elementary school classes, has been preceded neither by a study of elementary subject-matter nor by a course in "special methods;" what is apparently required work in history is limited to ancient history; the two-term course in the history of education is taken with the terms reversed; and the course in school management comes at a most inappropriate time. It seems, indeed, that the professional work is inserted wherever it will fit, without the slightest reference to its bearing upon other courses. It will be noted, too, that while the student has apparently intended to teach chemistry and mathematics, he actually teaches physics, in which he has had but three terms of collegiate work; physiography, in which he has had but two terms of secondary work; and agriculture, for which his equipment consists of two summer-quarter courses.

Mr. A. entered the normal school in the fall of 1908, and was in residence during the remainder of the academic year, and during the first two quarters of the following year. He left in the spring, presumably to teach, but returned in the fall for a full year's work, followed by a summer quarter. He taught a rural school for twelve weeks in the fall, returning for the second and third terms and the summer quarter. During the following year he also remained in residence for three terms and the summer quarter. He received the degree of B.S. in Education at the close of this period (1913), and became a teacher of physics, agriculture, and physical geography in a high school. His courses during this period were as follows:

¹ Throughout the table the number of teachers includes all who give instruction in the department. In many cases the same teachers give instruction also in other subjects, hence the total is usually smaller than the sum of the groups.

² This ratio ignores the frequently considerable amount of secondary instruction required of these same teachers.

FIRST YEAR

First term
 English grammar & composition
 Elementary English & American literature
 Ancient history (high school course)
 Algebra
 Gymnasium

Second term
 English grammar & composition
 Elementary English & American literature
 Ancient history (college course)
 Civil government
 Algebra
 Gymnasium

Third term
 Elementary English & American literature
 Ancient history (college course)
 Civil government
 Algebra
 Gymnasium

SECOND YEAR

First term
 Elementary psychology
 Rhetoric
 Plane geometry
 Physical geography
 Vocal music

Second term
 Principles of teaching
 Rhetoric
 Plane geometry
 Physical geography
 Manual training

Third term
 (Student dropped out, presumably to teach)

THIRD YEAR

First term
 Practice teaching
 Trigonometry
 Solid geometry
 Chemistry

Second term
 Rhetoric
 American constitution
 Trigonometry
 Chemistry
 Manual training

Third term
 School management
 American constitution
 Political economy
 Analytical geometry
 High school physics
 Chemistry

Summer, 1911
 English literature
 Analytical geometry
 College physics
 Chemistry

Fall, 1911
 (Student teaches a rural school)

Winter, 1912
 Applied chemistry (two courses)

Spring, 1912
 History of education
 German
 Calculus
 College physics

Summer, 1912
 English literature
 German
 Calculus
 Applied chemistry

Fall, 1912
 School administration
 Nineteenth century poetry
 German
 Organic chemistry

Winter, 1913
 History of education
 Nineteenth century poetry
 German
 Organic chemistry

Spring, 1913
 Nineteenth century poetry
 German
 American government and politics
 Organic chemistry

Summer, 1913
 English literature
 Electricity
 Soil management
 Corn

CASE 2. When it is remembered that the sixty-hour diploma designates ability to teach in the elementary school, the inadequacy of this student's program is obvious. Miss B., it will be noted, takes a full year of ancient history in the normal school. The records show, however, that she has already presented a unit of ancient history for entrance, and that this is the only course in history presented for entrance. Consequently, she has in all two years of ancient history, two terms of English history, and only one term of American constitutional history to prepare her to teach United States history in the elementary school. She was admitted to practice teaching in the third term after having completed but one course that directly prepared for practice teaching—and this was taken two terms earlier. Other professional courses ("methods" courses) she took in the later summer quarters, presumably after her experience in teaching had shown her the need of such work.

Miss B. entered the normal school in the fall of 1911. She presented for entrance $12\frac{1}{2}$ high school units. She remained in residence during the three terms of the academic year and the following summer quarter. She apparently taught for the two years following, returning for the summer quarters of 1913 and 1914. At the close of the latter quarter she received the sixty-hour diploma. The work of the six terms during which she was in residence appears below:

FIRST YEAR

First term
Teaching of language and literature
Rhetoric
Ancient history
Vocal music
Chorus
High school Latin

Second term
Nineteenth century literature
Advanced composition and argumentation
Ancient history
Drawing
Chorus
High school Latin

Third term
Practice teaching
History of education
American literature
Ancient history
Drawing (two courses)
Chorus
High school Latin

Summer quarter, 1912
Methods of teaching music
Teaching of algebra and arithmetic
"Teachers' special"
American literature
Shakespeare

Summer quarter, 1913
Eighteenth century prose
American constitutional history
English history
Vocal music
Harmony

Summer quarter, 1914
Nineteenth century literature
Library economy
American government and politics
English history
Harmony

CASE 3. The inadequacy of this curriculum, likewise, as a preparation for elementary school teaching is apparent. The student is plunged at the very outset into responsible practice teaching, undertaking at the same time two courses which are supposed both to be consecutive and to be prerequisites to such teaching. She is apparently ambitious to teach Latin and history in the high school, altho she accepts a sixty-hour diploma "designating ability" to teach in the elementary school. For some reason she elects a full year of agriculture and a term of manual training. It is possible—and indeed probable—that these elections are made simply and solely to meet group requirements. Certainly, the wisdom of a group-requirement system that permits and apparently encourages a program of this type is seriously to be questioned.

Miss C. B. entered the normal school in the fall of 1909. She remained in residence for two terms. She returned in the summer quarter of 1911, and remained for this and the three succeeding terms. The work for the sixty-hour diploma was completed in the summer quarters of 1913 and 1914. She presented fifteen secondary units for entrance. The courses completed in the normal school follow:

FIRST YEAR

First term
Elementary psychology
Principles of teaching
Practice teaching
Trigonometry
Vocal music

Second term
Principles of teaching
Teaching of language and literature
Trigonometry
Gymnasium

Summer quarter, 1911
Vergil
Ancient history
History of mathematics
Agriculture

SECOND YEAR

First term, 1911
Practice teaching
American literature
Cicero
Sallust
Ancient history

Second term, 1911
Advanced composition and argumentation
Ovid
English history
Horace
Manual training

Third term, 1912
Advanced composition and argumentation
Vergil
English history
Farm crops

Summer quarter, 1913

Teaching of Latin
American literature
English history
Cereals
Vocal music

Summer quarter, 1914

History of education (two
terms' work at the same
time)
American literature
Library economy

CASE 4. It would be difficult to determine from an inspection of this program what this prospective teacher intends to teach. Altho she presented for entrance nearly two years' work in algebra, we find her electing a full year of algebra in the normal school and receiving credit for it toward the fifteen needed units of secondary work. She takes a term of Latin and a term of drawing. A collegiate professional course in the teaching of English is taken with only high school English as a background. A term of ancient history of high school grade is inserted between two terms of oriental history of collegiate grade, in the first term of which she had apparently been conditioned. A single term of chemistry in the final summer quarter is paralleled by two courses in household science and one course in home nursing. Aside from chemistry, twelve weeks' work in "corn" and the same amount of time spent on "cereals" (perhaps including "corn") apparently meet the "group requirements" in science.

Miss D. entered the normal school in the summer quarter of 1907. Her high school credits aggregated only 13½ units; hence her six terms' work at the normal school include several secondary courses. Five years elapsed between her first term's work in 1907 and her second term's work in the summer of 1912. After finishing a quarter, she taught (apparently) for one term, reëntering for the second and third terms of 1912-13, and remaining for the summer quarter of 1913. After another year of teaching (apparently), she returned to finish the work for the sixty-hour diploma in the summer of 1914. Her courses at the normal school were the following:

Summer quarter, 1907

Oriental history (collegiate)
English (high school)
Latin (first year high school)
Music

Summer quarter, 1912

Psychology
School economy
Teaching of English
Sanitation
Drawing
Music

Winter, 1912

Teaching of history
Principles of teaching
Teaching of arithmetic and
algebra
Practice teaching
Algebra (high school)

Spring, 1913

Practice teaching
Library economy
Advanced composition
Corn
Ancient history (high school)
Algebra (high school)
Gymnasium

Summer, 1913

Oriental history (making up
condition?)
Practice teaching
School administration
Cereals
Algebra (high school)
Gymnasium

Summer, 1914

High school curriculum prob-
lems
Chemistry
Food preparation
Household decoration
Home nursing

CASE 5. From several points of view, this program is much better than any of those that have been previously discussed. The academic subjects are in the main well articulated and, generally speaking, each is extended over a period that is long enough to ensure a dividend from the time and energy expended. But the program is not satisfactory as a preparatory curriculum for elementary teaching. In the four years' work leading to the sixty-hour diploma the only elementary school subjects are English, American history, arithmetic, drawing, and music, and in each of these cases, with the possible exception of English, the courses taken are quite inadequate. One is tolerably certain that this student, while willing to teach in the elementary school as a means to an end, is really looking forward to high school teaching. Whatever work is done in preparation for elementary teaching, therefore, is quite likely to be done more or less perfunctorily.

Miss E. enters the normal school in the fall of 1908, and is in residence during the succeeding academic year. She apparently teaches for a year, returning in the fall of 1910 and remaining thru the winter and spring into the summer quarter of 1911. She remains out of school until the spring of 1912, when she returns for the spring and summer quarters. She repeats this process in 1913, and finally completes the work for the sixty-hour diploma in the summer of 1914. About one-third of her preparatory work is done in secondary classes of the normal school. Her program follows:

CHIEFLY SECONDARY WORK

Fall, 1908
English
Beginning Latin
Algebra
Music (sight reading)

Winter, 1908
English
Latin
Plane geometry
Music (sight reading)
Manual arts

Spring, 1909
English
Latin
Plane geometry
Psychology (collegiate)
American history

Fall, 1910
English literature
Caesar
Algebra
Zoology
Civil government

Winter, 1910
Principles of teaching (collegiate)
Rhetoric
Caesar
European history
Algebra
Zoology

Spring, 1911
Zoology (collegiate)
Rhetoric
Caesar
European history
Civil government
Physiology

CHIEFLY COLLEGIATE WORK

Summer, 1911
Teaching arithmetic and algebra (collegiate)
Practice teaching
School economy
Solid geometry
Drawing (secondary)

Spring, 1912
School administration
English literature
Cicero
College algebra

Summer, 1912
English literature
Vergil
Mediaeval history
College algebra

Spring, 1913
Vergil
Mediaeval history
Trigonometry
History of education

Summer, 1913
English literature
Mediaeval history
Trigonometry
Physics

Summer, 1914
Practice teaching
History of education
Library economy
Analytical geometry
Physics

CASE 6. This program illustrates another attempt to kill two occupational birds with one educational stone. The student apparently wished to earn a certificate for elementary teaching, and took two terms' work at the normal school to enable her to do so. One-half of the twelve courses that formed her program during these two terms have no conceivable relation to elementary school teaching, yet she was not only permitted to take these courses, but was also given credit for them toward an elementary certificate.

Miss F. spent two terms in the normal school, entering with advanced standing from one of the colleges. She received the thirty-hour diploma at the close of the second quarter. Toward this diploma she was granted credit for the following courses taken in college: psychology, ethics, Bible, history of American literature, German (first year), vocal music, food preparation.

Her normal school work comprised the following courses:

Spring, 1914
Principles of teaching
Teaching of history
Teaching of English
Library economy

Summer, 1914
Practice teaching
Teaching of arithmetic
Bookkeeping (two courses)
Typewriting (three courses)
Shorthand

CASES 7, 8, 9. The character of the courses elected in the thirty-hour curriculum is even more important than the character of the work elected in the sixty-hour curriculum. The cases cited here are not exceptional; they are rather fairly typical of the thirty-hour elections in at least three of the Missouri schools. The brief time afforded by one year's training beyond the high school (the last case cited represents indeed only two terms of collegiate work) should not be wasted thru divided interest and a plurality of vocational objectives. If it is necessary to prepare elementary teachers upon so slender a basis as one year's training, there can certainly be no justification for not concentrating this training upon the problems that the elementary teacher must face and solve.

Miss G. received the thirty-hour diploma in 1914. Fourteen courses of collegiate grade formed the basis of the credits upon which the diploma was issued. Six of these fourteen courses were German (three courses), Latin (Ovid and Sallust), photography.

Miss H. was granted the thirty-hour diploma in 1914, and had earned in addition fifteen semester hours toward the sixty-hour diploma. Twelve and one-half hours are represented by ancient history, mediaeval history, trigonometry, zoology.

Mr. I. received the elementary certificate in 1914. Out of eight courses of collegiate grade for which credit was granted for this certificate, four were college algebra, analytical geometry, college physics (two courses).

CASE 10. This student's career illustrates clearly the actual working out of the theory upon which the curricula of the Missouri normal schools are constructed. Mr. J. receives the elementary certificate after completing in the normal school some thirty-eight courses, all of secondary grade. He had previously taught in rural and village elementary schools, but now with a certificate from the normal school, he is acceptable for appointment in a small high school. Attendance for five more terms at the normal school brings him to the "life certificate" and the degree of Ped.B. With this certificate, he receives an appointment as an elementary teacher in a small city system, altho the normal school has prepared him only very meagrely for the responsibilities of this position. Still further work—three terms in the normal school and three years' attendance upon Saturday classes at a neighboring university—earns for him the A.B. degree which is granted by the normal school. He is now an elementary school principal in a large city system,—again a position for which the courses that he took in the professional school have given him but slight training. These courses aggregated sixty-seven in number, and were rewarded at three successive points by diplomas or degrees each licensing the holder to teach in any public school of the state.

Mr. J. received the A.B. degree from one of the normal schools in 1912. The courses which he completed and the kind of teaching which he did in the interims of normal school residence are shown in the following tabular statement:

<i>Summer quarter, 1904</i>	<i>School year, 1904-05</i>	<i>Summer, 1905</i>	<i>Fall, 1905</i>
Oriental history	Teacher, rural school	English	English
Physical geography		Latin (first year, high school)	Latin
		Algebra (first year, high school)	American history
		Reading and voice culture	Plane geometry
		Manual training	Reading and speaking
			Gymnasium

<i>Winter, 1905</i> Teacher, Grades IV-VIII, village school	<i>Spring, 1906</i> Pedagogy English Latin	<i>Summer, 1906</i> Pedagogy Rhetoric Roman history	<i>Fall, 1906</i> Psychology Rhetoric Latin (Caesar) Plane geometry Manual training
<i>Winter, 1906</i> Rhetoric Latin (Caesar) Solid geometry Reading and voice culture	<i>Spring, 1907</i> Practice teaching History of English literature Latin (Caesar) American constitutional history Trigonometry Manual training	<i>Summer, 1907</i> Pedagogy Surveying (three courses) (Elementary certificate granted, August, 1907)	<i>School year, 1907-08</i> Teacher of all first-year subjects in a small high school
<i>Summer, 1908</i> Practice teaching English fiction Shakespeare Latin (Caesar) Physical geography	<i>Fall, 1908</i> History of education Mediaeval and modern history Advanced literature Physics Library economy	<i>Winter, 1908</i> Practice teaching History of education History of American literature	<i>Jan. 15-Apr. 15, 1909</i> Teacher of English and mathematics in a small high school
<i>Spring, 1909</i> Mediaeval and modern history College algebra	<i>Summer, 1909</i> School administration American literature Library (two courses?) Mediaeval and modern history Trigonometry (Degree B.Pd. granted, August, 1909)	<i>School year, 1909-10</i> Eighth grade teacher, small city system	<i>Summer, 1910</i> Latin (Cicero) German College physics Typewriting
<i>School year, 1910-11</i> Elementary school principal, large city system; student, Saturday classes, neighboring university	<i>Summer, 1911</i> German (two courses) College physics	<i>School year, 1911-12</i> Elementary school principal, large city system; student, Saturday classes, neighboring university	<i>Summer, 1912</i> German Latin (Sallust and Cicero)

TABLE 4. CITY TRAINING SCHOOL CURRICULA

A. THE HARRIS TEACHERS COLLEGE CURRICULUM FOR KINDERGARTNERS¹

<i>First Semester</i>	<i>Semester hours</i>	<i>Second Semester</i>	<i>Semester hours</i>
Drawing	4	Drawing	2
English	2	History	4
Geography	4	Music	2
Hygiene	1	Observation (kindergarten)	2
Music	2	Physical training	2
Penmanship	2	Primary	2
Physical training	2	Psychology	5
Science	2	Reading	1
Kindergarten	5	Science	3
Observation (kindergarten)	2	Kindergarten	4
	<u>26</u>		<u>27</u>

¹ From the *Report of the St. Louis Board of Education*, for 1914-15, pages 100, 101.

TABLE 4 (*continued*). A. THE HARRIS TEACHERS COLLEGE CURRICULUM FOR KINDERGARTNERS

<i>Third Semester</i>		<i>Fourth Semester</i>	
Apprentice work	Full time	Child psychology	3
		Drawing	2
		English	1
		History of education	4
		Music	2
		Physical training	1
		Theory of education	5
		Kindergarten	5
		Primary	2
			<u>25</u>

B. THE KANSAS CITY TEACHER-TRAINING CURRICULUM¹

FIRST YEAR

<i>First Semester</i>		<i>Second Semester</i>	
Biology	5 hours	Geography	5 hours
Psychology	5	General methods	4
Drawing	5	Literature and reading	5
Physiology and hygiene	3	Grammar and composition	3
Songs and games	2	Music	3
	<u>20</u>		<u>20</u>

SECOND YEAR

<i>First Semester</i>		<i>Second Semester</i>	
<i>First Ten Weeks</i>		<i>Third Ten Weeks</i>	
Primary or upper grade methods	5 hours	American history	5 hours
Physiology and hygiene	2	Physiology and hygiene	2
School management	3	School administration	3
History	5	Sociology	5
Physical education or music	2	Arithmetic	3
Arithmetic	3	Physical education or music	2
	<u>20</u>		<u>20</u>
<i>Second Ten Weeks</i>		<i>Fourth Ten Weeks</i>	
Teaching	Full time	Community civics	4 hours
		Nature study	3
		History of education	3
		Current educational theory	5
		Literature or elective	3 or 5
			<u>18 or 20</u>

§ III. DATES OF THE FIRST ESTABLISHMENT OF
STATE NORMAL SCHOOLS

Massachusetts	1838	Maine	1863	Texas	1879	Washington	1890
New York	1844 ²	Indiana	1865	North Dakota	1881	Oklahoma	1891
Connecticut	1849	Wisconsin	1865	South Dakota	1881	Idaho	1893
Michigan	1849	Vermont	1866	Oregon	1883	Montana	1893
Rhode Island	1852	Delaware	1866	Virginia	1884	New Mexico	1893
Iowa	1855	Nebraska	1867	Louisiana	1884	South Carolina	1895
New Jersey	1855	West Virginia	1867	Arizona	1885	Maryland	1896
Illinois	1857	Utah	1869	Wyoming	1886	Ohio	1900
Minnesota	1858	Missouri	1870	Florida	1887	Kentucky	1906
Pennsylvania	1859	New Hampshire	1870	Nevada	1887	Alabama	1907
California	1862	Arkansas	1872	Colorado	1889	Tennessee	1909
Kansas	1863	North Carolina	1876	Georgia	1889	Mississippi	1910

¹ This curriculum went into effect in September, 1917.² Training-classes in academies established in 1834.

§ IV. NORMAL SCHOOL TEACHERS

THE following tables present the more important data concerning the instructors in the five state normal schools. Tables 5-14 deal with individuals employed during the year 1914-15, and the remaining tables are based upon information for the year 1915-16, including the summer of 1916.

TABLE 5. AGE AND SEX DISTRIBUTION

<i>Ages</i>	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61 to 65	66 to 70	<i>Sub- Total</i>	<i>No Record</i>	<i>Total</i>
	%	%	%	%	%	%	%	%	%	%			
Men	1	17	16	23	21	9	8	1	3	1	99	7	106
Women	13	25	23	13	13	8	1	...	...	...	84	9	93
Both	6	21	19	20	17	9	5	1	1	1	183	16	199

TABLE 6. OCCUPATION OF FATHER

	<i>Agriculture and Forestry</i>	<i>Trade</i>	<i>Professional</i>	<i>All Other Occupations</i>	<i>Sub- Total</i>	<i>No Record, Retired, or Deceased</i>	<i>Total</i>
	%	%	%	%			
Men	67.5	11	17.5	4	92	14	106
Women	31	33	23	14	83	10	93
Both	50	21	20	9	175	24	199
Occupational Distribution of Mis- souri Census 1910	35.5	11.1	4.7	48.7			

TABLE 7. NUMBER OF OTHER TEACHERS IN THE FAMILY

	<i>None</i>	<i>One</i>	<i>Two</i>	<i>Three</i>	<i>Four</i>	<i>Five</i>	<i>Six or more</i>	<i>Sub- Total</i>	<i>No Record</i>	<i>Total</i>
	%	%	%	%	%	%	%			
Men	20	25	25	15	10	3	2	98	8	106
Women	29	26	23	15	2	3	2	88	5	93
Both	24	25	24	15	6	3	3	186	13	199

TABLE 8. A. DEGREES AND CLASS OF INSTITUTION FROM WHICH THEY WERE RECEIVED

Class of College ¹	KIRKSVILLE			WARRENSBURG			CAPE GIRARDEAU			SPRINGFIELD			MARYVILLE			TOTAL		
	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.
I	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
	14	50	10	1	9	39	9	1	13	62	7	3	4	25	6	46	42	33
Women	6	33	1	..	9	45	2	..	7	33	3	..	4	44	2	32	34	9
Both	20	43	11	1	18	42	11	1	20	48	10	3	8	52	8	77	89	42
II	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
	1	2	..	..	1	..	..	..	1	..	..	..	4	..	..	11	10	2
Men	1	2	..	..	1	..	..	..	1	..	..	..	4	..	..	11	10	2
Women	2	7	1	1	..	1	..	..	..	..	..	..	..	..	..	7	7	2
Both	3	8	1	1	..	1	..	..	1	..	..	..	4	..	..	21	10	4
III	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
Men	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
Women	1	2	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	1
Both	1	2	..	..	1	..	..	..	..	..	..	..	..	..	..	4	1	1
V	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
	9	5	1	1	1	..	..	..	2	8	1	1	3	..	..	21	4	1
Men	9	5	1	1	1	..	..	..	2	8	1	1	3	..	..	21	4	1
Women	6	7	..	..	..	..	..	..	..	..	..	..	..	..	..	15	1	..
Both	15	12	1	1	1	..	..	..	2	8	1	1	3	..	..	36	5	1
Total hold- ing Degrees	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
	25	89	10	1	18	78	10	2	18	86	8	3	11	69	7	88	78	39
Men	14	78	1	..	12	60	3	..	13	63	4	..	15	60	2	58	62	13
Women	9	86	11	1	30	70	13	2	51	74	12	3	15	60	9	30	16	26
Both	24	86	11	1	48	80	25	2	64	80	20	6	30	60	11	88	74	39

B. DEGREES HELD BY TEACHERS AT THE NORMAL SCHOOLS, AT THE SOLDAN HIGH SCHOOL IN ST. LOUIS,²
AND AT THE STATE UNIVERSITY

Class of College	CLASS I			CLASS II			CLASSES III & IV			CLASS V			TOTAL		
	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.	A.B. Ph.B.	M.A. M.S.	Ph.D.
Missouri Normal Schools	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.
	77	39	21	6	21	10	4	..	..	36	18	6	141	71	26
Soldan High School, St. Louis	64	65	21	25	11	11	3	1	..	8	..	2	168	82	29
Missouri State University ³	111	74	78	52	70	14	6	1	..	3	2	..	189	92	57
Both	142	77	99	31	32	25	10	1	..	44	18	8	313	153	55

¹ For classification see page 101, note 2.² Included here are three teachers, one at Springfield and two at Cape Girardeau, who reported higher degrees but gave no information as to their bachelor's degrees.³ Only teachers in the colleges of agriculture and liberal arts and in the school of education were considered here as likely to be concerned with the preparation of teachers.⁴ At the state university an additional 3 per cent appear from their advanced degrees to have taken the bachelor's degree also, although none is reported.

TABLE 9. DEGREES HELD BY TEACHERS IN VARIOUS NORMAL SCHOOL DEPARTMENTS¹

	Advanced Degrees			Four-year Degrees and Higher			Two-year Degrees Only			Reporting No Degree			Degrees from First Class Institutions			Total Number Reporting		
	Men	Women	Both	Men	Women	Both	Men	Women	Both	Men	Women	Both	Men	Women	Both	Men	Women	Both
<i>Academic Subjects</i>																		
Foreign Language	66	40	65	83	100	91	...	...	...	17	...	9	83	89	82	6	5	11
Pure Science	64	...	64	92	...	...	...	...	...	8	...	8	54	...	64	13	...	13
Mathematics	70	27	60	90	67	81	...	17	13	...	16	6	70	60	62	10	6	16
History, Government & Geography	65	25	54	83	68	74	...	...	6	...	...	...	78	63	70	14	3	17
English	50	25	38	100	93	96	...	...	...	...	8	...	61	79	78	12	13	24
Household Arts	...	22	...	100	100	100	...	...	...	...	...	...	67	...	67	9	...	9
Agriculture	11	...	11	100	...	100	...	...	...	...	...	...	...	...	...	...	...	...
<i>Professional Subjects</i>																		
Class Instructors	40	11	24	100	55	76	...	17	9	...	98	15	73	39	65	15	12	33
Supervisors	...	7	7	...	21	27	100	43	47	...	29	27	74	14	13	1	16	16
<i>All Academic Subjects</i>	50	25	41	94	91	93	3	3	3	3	6	4	69	60	66	64	32	96
<i>All Professional Subjects</i>	38	9	19	94	44	60	6	28	21	...	28	19	69	23	41	16	22	48
<i>All Other Subjects²</i>	6	...	2	16	43	29	14	21	18	71	37	63	10	8	9	21	24	45
																Total	101	91

¹ Four presidents, two librarians, and one director of extension work not giving instruction are omitted.² Include fine arts, industrial arts, commercial subjects, library economy, music, and physical training.

TABLE 10. SOURCES OF DEGREES

	<i>Bachelor's Degree</i>		<i>Master's Degree</i>		<i>Doctor's Degree</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Number holding degrees	138 ¹	100	52	100	7	100
University of Missouri	37	27	16	31	...	...
Missouri Normal Schools	17	12	...	...	...	...
University of Chicago	10	7	6	11	1	14.2
Drury College (Missouri)	9	6	2	4	...	...
Columbia University	7	5	6	11	1	14.2
University of Kansas	5	4	...	...	...	...
Central College (Missouri)	3	2	2	4	...	...
University of Michigan	3	2	...	...	2	29
Indiana University	2	1.5	3	6	...	...
University of Wisconsin	2	1.5	2	4	...	...
Missouri Valley College (Missouri)	2	1.5	...	...	...	...
Harvard University	...	...	2	4	...	...
Brown University	1	1	4	7.5	...	...
Vanderbilt University	...	...	1	2	1	14.2
University of Pennsylvania	...	...	...	...	1	14.2
Illinois Wesleyan University	...	...	...	...	1	14.2
Other Missouri Colleges ²	8	6	2	4	...	...
Other Middle Western Colleges	20	14	4	7.5	...	...
Other Eastern Colleges	5	4	2	4	...	...
Other Southern Colleges	5	4	...	...	...	...
Foreign and Western	2	1.5	...	...	...	...

TABLE 11. COMBINATIONS OF TRAINING

	<i>Normal Schools</i>			<i>University of Missouri</i>
	<i>Men</i>	<i>Women</i>	<i>Total</i>	
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
High School, Normal School, College	12	34	23	.5
High School, College, Graduate	30	12	22	74
High School, Normal School	8	22	14	.5
High School, College	9	12	11	9
High School, Normal School, College, Graduate	12	9	11	10
High School	8	2	5	.5
Normal School, College, Graduate	5	3	4	2
Normal School	2	5	3	...
Normal School, College	5	1	3	.5
High School, Normal School, Graduate	5	...	2	...
College	2	...	1	...
College, Graduate	...	...	...	3
Normal School and Graduate	1	...	.5	...
Special School Training	1	...	.5	...
	100	100	100	100

TABLE 12. TOTAL TEACHING EXPERIENCE

<i>Number of years</i>	1 to 2	3 to 5	6 to 8	9 to 12	13 to 16	17 to 20	21 to 25	26 to 30	31-	5 or less	More than 12	<i>Total No.</i>
<i>Normal Schools</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	
Men	3	6	15	16	16	15	14	7	8	9	60	101
Women	8	13	17	24	11	12	9	5	1	21	33	91
Both	5	9	16	20	14	14	11	6	5	14	50	192
<i>University of Missouri</i>												
Men	7	24	14	16	11	11	11	2	4	31	39	132
Women	28	14	22	...	...	22	14	...	...	42	26	14
Both	9	23	15	14	10	12	11	2	4	32	39	146

¹ Three teachers holding higher degrees gave no information as to their bachelor's degrees, which are here omitted.² Colleges not listed have but one graduate.

NORMAL SCHOOL TEACHERS

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TABLE 13. COMBINATIONS OF TEACHING EXPERIENCE (GROUPS MUTUALLY EXCLUSIVE)

	Men	Women	Total
	%	%	%
Administrative, including varying teaching experience	42	4	24
Elementary and Secondary	13	30	22
Elementary only	7	30	18
Secondary only	10	8	9
Elementary, Secondary, and College	11	3	7
Normal School only	4	10	6
Secondary and College	6	6	6
College only	5	6	5
Elementary and College	2	3	3
	100	100	100

TABLE 14. VARIETIES OF TEACHING EXPERIENCE (GROUPS OVERLAP)

	Men	Women	Total
	%	%	%
Secondary	76	50	63
Grade School	46	66	56
Rural School	64	43	54
Principal of Secondary School	50	11	31
City Superintendent	39	3	22
Principal of Elementary School	29	8	19
College	19	14	17
University	16	4	10
Normal School only	4	10	7
County Superintendent	10	1	3
State Superintendent	2	...	1

TABLE 15. DISTRIBUTION OF ANNUAL SALARIES, 1915-16¹

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTALS	UNIVERSITY OF MISSOURI ²
	%	%	%	%	%	%	%
Less than \$900							
Men	9	...	...	...	...	2	1
Women	7	...	...	...	...	2	...
Both	8	...	...	...	...	2	1
\$901 to \$1200							
Men	9	...	...	...	6	3	2
Women	43	16	25	33	33	29	10
Both	22	7	10	20	16	15	3
\$1201 to \$1500							
Men	23	4.5	11	8	6	11	18
Women	29	53	42	61	45	47	50
Both	25	27	24	37	20	27	21
\$1501 to \$1800							
Men	32	41	33	31	75	42	8
Women	14	31	25	...	22	18	...
Both	25	37	30	13	56	31	7
\$1801 to \$2400							
Men	27	50	50	61	13	40	25
Women	7	...	8	6	...	4	40
Both	20	27	33	30	8	24	26
Over \$2400							
Men	...	45	6	...	...	2	46
Women	...	...	...	...	...	...	...
Both	...	2	3	...	...	1	42
Median							
Men	(22) ³ \$1680	(22) \$1950	(18) \$1860	(18) \$1920	(16) \$1650	(91) \$1800	(101) \$2200
Women	(14) 1230	(19) 1500	(12) 1500	(18) 1380	(9) 1400	(72) 1400	(10) 1467
Both	(36) 1500	(41) 1750	(30) 1650	(31) 1400	(25) 1650	(163) 1650	(111) 2200

¹ Only regular, full-time instructors receiving more than \$800 are represented.

² The salaries of all regular normal school teachers are paid in twelve parts and are based upon four twelve-week terms of service — a fact which should be borne in mind when comparison is made with workers in other fields, the university, for example, where the salary is for two semesters or the equivalent of three terms at the normal schools. Pay for instruction during the summer session is two-thirds of pro rata in addition at the university, while at the normal schools it is a part of the year's salary. To allow for this difference, the university salaries in the table have been increased by two-ninths, making them comparable, for similar length of service, with salaries at the normal schools.

³ The numbers in parenthesis indicate the number of teachers considered.

TABLE 16. DEPARTMENTAL SALARIES, 1915-16

DEPARTMENT		KIRKSVILLE		WARRENSBURG		CAPE GIRARDEAU		SPRINGFIELD		MARYVILLE		TOTALS	
		No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range
Academic Subjects	Science	Men	2 1740-2100 1920	4 1660-2250 2013	4 1267-2160 1697	4 1000-2250 1643	3 1200-1800 1550	17 1000-2250 1735					
		Women	2 1740-2100 1920	4 1660-2250 2013	4 1267-2160 1697	4 1000-2250 1643	3 1200-1800 1550	17 1000-2250 1735					
	Ancient Languages	Men	1 1860 1860	.....	1 1560 1560	1 2400 2400	1 1650 1650	4 1660-2400 1868					
		Women	2 1660-1860 1710	1 1500 1500	1 1560 1560	2 1200-2400 1800	1 1650 1650	3 1890-1960 1820					
Agriculture	Men	2 885-1740 1313	3 1568-2200 1836	2 1500-2100 1800	2 1200-2400 1800	2 1500-1800 1650	7 1200-2400 1676						
		Women	2 885-1740 1313	3 1568-2200 1836	2 1500-2100 1800	2 1200-2400 1800	2 1500-1800 1650	11 885-2200 1644					
	Mathematics	Men	4 1500-2100 1725	5 937-2400 1632	2 1440-2160 ¹ 1800	5 1200-2400 1800	4 1200-2160 ¹ 1628	20 977-2400 1711					
		Women	4 1500-2100 1725	5 937-2400 1632	2 1440-2160 ¹ 1800	5 1200-2400 1800	4 1200-2160 ¹ 1628	20 977-2400 1711					
Government, History & Geography	Men	6 1200-2400 1740	6 1000-2400 1533	4 1300-1980 1690	7 1000-2400 ¹ 1657	6 960-1800 1510	29 960-2400 1599						
		Women	7 1260 1260	7 1300 1300	5 1300-1980 1662	12 1000-2400 1324	6 1000-1600 1335	37 960-2400 1542					
	Modern Foreign Languages	Men	1 1680 1680	.....	2 1300-1800 1560	2 1200-1400 1300	1 1350 1350	3 1300-1800 1598					
		Women	1 1680 1680	.....	2 1300-1800 1560	2 1200-1400 1300	1 1350 1350	3 1300-1800 1598					
English	Men	4 1260-2400 ¹ 1680	3 1538-2400 1913	3 900-1980 1480	8 1000-1920 1340	4 1500-1650 1475	14 900-2400 1667						
		Women	4 1260-2400 ¹ 1680	3 1538-2400 1913	3 900-1980 1480	8 1000-1920 1340	4 1500-1650 1475	14 900-2400 1667					
	Household Arts	Men	2 1200 1200	4 800-1600 1194	2 1200-1620 1410	2 1200-1820 1260	1 1800 1800	11 800-1800 1301					
		Women	2 1200 1200	4 800-1600 1194	2 1200-1620 1410	2 1200-1820 1260	1 1800 1800	11 800-1800 1301					
Professional Subjects	Education	Men	3 1080-2100 1760	6 1000-2600 ¹ 1400	4 1800-2460 2040	6 1600-2400 1991	3 1200-2220 1740	22 1000-2600 1773					
		Women	4 1080-1680 1260	6 1000-1650 1360	3 1020-1560 1360	5 1200-1400 1320	2 1500-1740 1630	19 1020-1740 1341					
	Supervision	Men	7 1080-2100 1491	11 1000-2600 1345	7 1020-2460 1749	11 1200-2400 1686	5 1200-2220 1692	41 1000-2600 1573					
		Women	7 1080-2100 1491	11 1000-2600 1345	7 1020-2460 1749	11 1200-2400 1686	5 1200-2220 1692	41 1000-2600 1573					
All Academic Subjects	Men	20 885-2400 1703	20 937-2400 1750	16 900-2160 1600	15 1000-2400 1715	18 960-2160 1565	89 885-2400 1686						
		Women	7 1200-1560 1269	23 800-1800 1382	6 1200-1920 1560	17 1000-1920 1285	5 1050-1800 1380	48 800-1920 1353					
	All Professional Subjects	Men	27 885-2400 1691	53 800-2400 1605	22 900-2160 1655	32 1000-2400 1486	23 960-2160 1525	137 800-2400 1569					
		Women	3 1080-2100 1760	7 1000-2600 1543	4 1800-2460 2040	5 1600-2400 1910	3 1200-2220 1740	22 1000-2600 1773					
All Other Subjects ²	Men	10 1080-2100 1488	19 834-2600 1402	11 1020-2460 1583	12 1320-2400 1683	7 1200-2220 1551	59 834-2600 1505						
		Women	6 1800-2520 1770	5 1265-2000 1773	3 1680-1800 1760	2 1500-1800 1650	4 1200-1800 1538	20 1200-2520 1711					
	All Academic Subjects	Men	8 840-1620 1080	6 960-1800 1335	4 1100-1500 1351	4 1000-1600 1100	2 1300-1400 1300	25 840-1800 1197					
		Women	14 840-2520 1376	10 960-2000 1554	7 1100-1800 1526	8 1000-1800 1238	6 1200-1800 1458	45 840-2520 1425					

NOTE: Sixteen instructors receiving less than \$800 annually, or paid at a lower rate, are omitted. Summer instructors are included with salaries pro-rated as if on full time for the year. Instructors in two or more departments are included in each except in the totals, where they are assigned to the group with which they do their major work. Owing to such duplicates the averages in the totals occasionally vary from the expected average.

¹ Highest salary paid to a "dean," i.e. a teacher whose hours of teaching may or may not be somewhat reduced to allow for administrative duties.

² These include fine arts, industrial arts, commercial subjects, library economy, and physical training.

TABLE 17. LENGTH OF WEEKLY PROGRAMS, 1915-16

<i>Hours per week</i>	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
Less than 20	%	%	%	%	%	%
Regular Session	28	6	54	12	35	26
Summer Session	18	5	58	3	19	18
Total	26	6	55	9	29	23
20 to 24						
Regular Session	71	44	41	57	49	52
Summer Session	67	30	38	30	46	40
Total	69	39	40	47	48	49
25 to 29						
Regular Session	1	44	5	20	16	19
Summer Session	15	60	4	50	27	35
Total	5	49	5	31	20	24
30 to 34						
Regular Session		6		9	...	3
Summer Session		5		17	8	7
Total		6		12	3	4
35 hours and over						
Regular Session				2		<1
Summer Session				...		...
Total				1		<1

NOTE: Teachers of fine arts, industrial arts, commercial subjects, library economy, music, and physical training, together with all teachers receiving \$800 or less are omitted. Laboratory periods are reckoned at one-half the time value of lecture or recitation periods.

TABLE 18. SALARIES OF NORMAL SCHOOL TEACHERS ACCORDING TO THEIR GRADE OF WORK, 1915-16

Per cent of group	College Classes only	College Classes chiefly	Secondary Classes chiefly	Secondary Classes only
	%	%	%	%
Men	13	52	31	4
Women	3	39	52	6
Both	10	48	38	4
Average monthly salary				
Men	\$176	\$157	\$153	\$133
Women	113	126	119	92
Both	170	149	139	117

NOTE: The above table includes only regular, full-time instructors receiving over \$800. All training-school instructors and teachers of special subjects have also been omitted.

TABLE 19. EXTENT OF SECONDARY WORK REPORTED BY THE FORTY-ONE BEST-TRAINED NORMAL SCHOOL TEACHERS, 1915-16

A. Proportion of Secondary Student Grades

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
Whole year	31% ¹	39%	28%	38%	53%	36%
Summer only	15%	27%	26%	26%	48%	26%

B. Proportion of Secondary Classes

Whole year	29%	37%	28%	35%	45%	34%
Summer only	15%	31%	30%	31%	42%	29%

¹ That is, 31 per cent of the student grades reported by the members of this "best-trained" group who taught at Kirksville were given for secondary work; the balance were collegiate.

TABLE 20. TRAINING OF EIGHTY-ONE¹ TEACHERS WHO TAUGHT ONLY IN THE SUMMER SESSION, 1916

		KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
Number of Teachers	Men	19	10	5	8	8	50
	Women	8	7	5	9	2	31
	Both	27	17	10	17	10	81
Advanced degrees from college or university	%	%	%	%	%	%	%
	Men	...	30	40	25	38	20
	Women	...	14	...	..	...	3
	Both	...	24	20	12	30	13
Four-year degrees or higher from college or university	Men	11	50	60	63	100	46
	Women	38	29	20	56	50	39
	Both	19	41	40	59	90	43
Any college or university training	Men	42	70	80	100	100	70
	Women	50	71	60	100	100	74
	Both	44	71	70	100	100	72
Degrees from first class institutions	Men	11	50	60	38	75	38
	Women	38	29	20	33	50	32
	Both	19	41	40	35	70	36
Four-year degrees from normal schools	Men	32	10	20	38	...	22
	Women	13	...	...	...	...	3
	Both	26	6	10	18	...	15
Any normal school training	Men	79	100	80	75	25	74
	Women	75	71	100	73	100	81
	Both	78	88	90	76	40	77
Trained in local normal school only	Men	58	30	20	...	...	30
	Women	50	29	20	...	...	23
	Both	56	29	20	...	...	27
Any local training	Men	79	100	60	50	25	68
	Women	50	57	80	67	50	61
	Both	70	82	70	59	30	65

¹ Thirteen other teachers were employed in the summer from whom these data could not be secured.

TABLE 21. SALARY AND HOURS OF NINETY-THREE SUMMER INSTRUCTORS IN MISSOURI NORMAL SCHOOLS, 1916

(Table gives (1) the instructor's weekly program, (2) his monthly salary divided by his hours of work per week, and (3) his annual salary in his regular position elsewhere, in case he held one)

KIRKSVILLE			WARRENSBURG ¹			CAPE GIRARDEAU			SPRINGFIELD			MARYVILLE		
(1) No. of Hours per Week	(2) Salary per weekly hour at Normal School	(3) Regular Salary in Winter	(1) No. of Hours per Week	(2) Salary per weekly hour at Normal School	(3) Regular Salary in Winter	(1) No. of Hours per Week	(2) Salary per weekly hour at Normal School	(3) Regular Salary in Winter	(1) No. of Hours per Week	(2) Salary per weekly hour at Normal School	(3) Regular Salary in Winter	(1) No. of Hours per Week	(2) Salary per weekly hour at Normal School	(3) Regular Salary in Winter
Men														
15 ²	\$1.66	\$10.90	5 ²	\$2.00	\$7.65	10 ²	\$1.66	\$12.00	32 ¹	\$2.56	\$10.00	20	\$5.00	\$13.50
5 ²	2.00	8.00	11 ²	2.27	10.00	24 ¹	4.51	17.00	11 ²	3.03	.....	20	6.00	13.50
5 ²	2.00	.....	5	2.50	.....	13	5.77	12.00	25	3.33	10.00	20	6.00	15.00
5 ²	2.00	7.20	10 ²	2.50	9.00	18	6.94	13.50	10 ²	3.33	10.00	20	6.00	10.80
10 ²	2.00	.....	25	3.12	.....	12	12.50	17.10	10 ²	3.33	12.00	15	6.33	.....
10 ²	2.00	7.65	25	3.33	.....	25	.....	.....	30	3.47	10.35	20	6.25	20.00
10 ²	2.00	6.75	25	3.33	9.00	24	4.84	.....	20	4.84	.....	20	6.25	16.00
10 ²	2.50	.....	25	3.33	13.50	25	.....	.....	20	6.33	15.00	20	6.25	18.00
10 ²	2.50	12.00	25	3.33	14.50	25	4.16	.....	30	5.33	.....	15	8.33	.....
10 ²	2.50	11.25	25	4.16	.....	25	4.58	.....	15	5.55	13.00	.....	.....	.....
5 ²	2.50	.....	25	4.58	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10 ²	3.00	12.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10 ²	3.60	11.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5 ²	4.00	7.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	5.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	5.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	6.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	6.00	10.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17 ¹	11.42	24.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Women														
5 ²	0.00	7.50	5 ²	2.50	7.50	10 ²	1.66	4.68	30	2.77	9.00	25	4.00	.....
5 ²	0.00	742.50	5	2.50	.....	25	1.66	7.65	25	3.33	7.65	20	4.37	8.65
5 ²	0.00	6.85	20	3.33	.....	20	3.33	8.70	25	3.33	.....	10	6.00	12.50
5	0.00	4.95	25	3.33	10.00	3	4.05	.....	25	3.33	7.65	.....	.....	.....
20	3.75	9.00	20	4.16	8.10	19	4.82	15.50	15 ²	3.33	7.50	.....	.....	.....
25	4.00	.....	20	4.16	9.45	.....	.....	.....	7 ¹ ²	3.33	8.10	.....	.....	.....
20	5.00	12.00	3 ²	4.16	6.30	.....	.....	.....	25	4.00	7.50	.....	.....	.....
25	5.60	4.20	15	4.63	.....	.....	.....	.....	20	4.16	.....	.....	.....	.....
.....	.....	.....	15	8.33	.....	.....	.....	.....	20	4.16	7.20	.....	.....	.....
.....	.....	.....	10 ²	8.33	6.00	.....	.....	.....	30	4.44	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	20	5.00	4.50	.....	.....	.....

¹ One other teacher was employed at Warrensburg from whom these data were not secured.

² Registered also as student in advanced undergraduate classes.

§ V. NORMAL SCHOOL STUDENTS

TABLE 22. A. CLASSIFICATION OF TOTAL ENROLMENT, 1913-14¹

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
Collegiate Men	170	225	140	167	68	770
Collegiate Women	501	901	325	556	199	2482
Secondary Men	262	235	234	365	114	1210
Secondary Women	543	566	349	843	372	2672
Total Men	432	460	374	532	182	1980
Total Women	1044	1467	674	1398	571	5154
Total Both	1476	1927	1048	1930	753	7134

B. "STANDARD" ENROLMENT, 1913-14

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
Standard enrolment ²	887	1139	650	1084	424	4184
Per cent of total enrolment (Table 22 A)	60	59	62	56	56	59

TABLE 23. PROPORTION OF MEN IN VARIOUS NORMAL SCHOOL CLASSIFICATIONS, 1913-14

	KIRKSVILLE			WARRENSBURG			CAPE GIRARDEAU			SPRINGFIELD			MARYVILLE			TOTAL		
	Reg.	Sum.	Both	Reg.	Sum.	Both	Reg.	Sum.	Both	Reg.	Sum.	Both	Reg.	Sum.	Both	Reg.	Sum.	Both
	Sess.	Sess.		Sess.	Sess.		Sess.	Sess.		Sess.	Sess.		Sess.	Sess.		Sess.	Sess.	
	only			only			only			only			only			only		
Collegiate	32 ³	20	25	25	16	20	33	26	30	26	20	23	22	30	25	28	20	24
Secondary	41	19	33	36	23	29	50	27	40	33	26	30	32	17	23	38	23	31
Total	37	19	29	30	19	24	42	27	36	31	24	28	28	21	24	34	21	28

TABLE 24. CHANGES IN THE PROPORTION OF MEN STUDENTS SINCE 1871⁴

1871	1881	1891	1901	1911	1914
55%	59%	47%	45%	33%	28%

¹ The figures here given total more than eight hundred fewer than the catalogued figures of the several schools for the same year (8907). The difference is due mainly to a surprisingly large number of names listed in the catalogues for which no trace of attendance was found; they either never appeared after registration or speedily dropped out. A few were in extension classes, and certain others were local members of gymnasium or music classes and not *bona fide* students at the school.

² The term "standard" enrolment is here applied to the enrolment of one student for three terms or 36 weeks. Reduced to such units, the total enrolment at each school is cut down by about two-fifths; the actual average enrolment being for from 1.7 to 1.9 terms.

³ Thus, 32 per cent of the collegiate enrolment in the regular session at Kirksville were men, while only 20 per cent of the collegiate students enrolling only in the summer were men.

⁴ Proportions at each school are for the years indicated except as follows: Warrensburg, 1873; Cape Girardeau, 1874; Kirksville, 1882 and 1893, and Maryville, 1912.

TABLE 25. PROPORTION OF SECONDARY ENROLMENT, 1913-14

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
	%	%	%	%	%	%
Regular Session						
Men	68 ¹	53	66	71	64	65
Women	59	41	49	63	53	53
Both	62	44	56	66	55	57
Attending in Summer only						
Men	43	49	56	65	61	55
Women	45	37	55	57	76	51
Both	45	39	55	59	72	52
Total Enrolment						
Men	61	51	63	69	63	61
Women	53	39	53	60	65	53
Both	54	42	56	63	65	55

TABLE 26. AGE DISTRIBUTION OF TOTAL ENROLMENT, 1913-14

	Less than 16	Less than 17	Less than 18	Less than 19	Less than 20	20	21	More than 21	More than 22	More than 23	More than 25	More than 30	More than 40
	%	%	%	%	%	%	%	%	%	%	%	%	%
Collegiate Men	<1	1	4	9	19	11	10	60	48	40	25	9	2
Collegiate Women	<1	1	3	11	24	16	13	47	37	28	16	5	1
Both	<1	1	3	11	23	15	12	50	40	31	19	6	2
100%													
Secondary Men	3	8	16	29	43	14	10	33	24	17	11	4	1
Secondary Women	2	8	18	34	47	13	9	32	25	20	12	5	1
Both	2	8	18	32	46	13	9	32	25	19	12	5	1
100%													
Total Men	2	5	11	21	34	13	10	43	33	26	16	6	2
Total Women	1	4	11	23	36	14	11	39	31	24	14	5	1
Both	1	5	11	23	35	14	11	40	32	24	15	5	1
100%													

TABLE 27. NATIONALITY OF PARENTS²

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
<i>Parents of the same nationality</i>	%	%	%	%	%	%
American	65	54	35	51	67	53
English	5	5	8	12	2	7
German	4	5	11	4	4	6
Irish	1	2	3	2	2	2
All Others	<1	2	2	1	<1	1
<i>Parents of mixed nationality</i>	25	32	41	30	25	31
	100	100	100	100	100	100
<i>Proportion of foreign strains among parents in mixed group</i>	%	%	%	%	%	%
English	18	20	17	17	14	18
German	19	16	19	17	15	17
Irish	15	12	12	14	16	13
All Others	48	52	52	52	55	52
	100	100	100	100	100	100

¹ Thus, in the regular session of 1913-14 at Kirksville, 68 per cent of the men were secondary students, the remaining 32 per cent being collegiate.

² Question answered on 90 per cent of the student cards, 1915. See page 402, par. 5.

TABLE 98. FATHER'S OCCUPATION¹

	Collegiate Men			Collegiate Women			Secondary Men			Secondary Women			Total			Missouri Census 1910															
	Kve.	Whg.	C. G. Spfd.	Mve.	Tot.	Kve.	Whg.	C. G. Spfd.	Mve.	Tot.	Kve.	Whg.	C. G. Spfd.	Mve.	Tot.																
Agriculture 46	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%															
	68	62	51	74	65	62	54	51	28	47	53	48	81	70	75	88	82	77	80	75	67	80	85	77	71	62	56	73	75	65	35.5
	2	5	9	4	—	5	5	9	14	10	7	8	3	7	5	4	2	5	5	5	6	4	1	5	4	7	8	5	2	6	23.6
	11	15	11	9	22	13	17	18	22	23	33	20	9	13	8	6	9	9	9	8	12	8	10	9	12	14	14	11	16	13	11.1
Professional Service All Others	13	11	20	11	4	13	12	10	22	14	2	12	4	7	9	5	2	6	3	6	8	6	1	5	7	8	14	8	2	9	4.7
	6	7	9	2	9	7	12	12	14	6	5	12	3	3	3	2	5	3	3	6	5	2	3	4	6	9	8	3	5	7	25.1
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100.0

¹ For Kirksville, Warrensburg, and Cape Girardeau, the proportions are drawn from the entire enrolment in 1913-14. For Springfield and Mayville, where such data could not be secured, the proportions are based on the student cards of 1915. See page 402, par. 5.

TABLE 29. FATHER'S INCOME ¹

	<i>Less than \$501</i>	<i>Less than \$801</i>	<i>Less than \$1001</i>	<i>\$1001-\$1500</i>	<i>More than \$1500</i>	<i>More than \$2000</i>	<i>More than \$3000</i>	<i>Total Number</i>
<i>All Schools</i>	%	%	%	%	%	%	%	
Total	13	28	50	20	30	19	10	1146
Total Men	16	33	54	21	25	15	7	468
Total Women	12	25	47	19	34	21	12	678
Collegiate Men	16	35	52	20	28	16	7	187
Collegiate Women	6	14	34	21	45	20	15	279
Secondary Men	16	32	55	22	23	15	7	281
Secondary Women	16	23	56	17	27	16	10	399
KIRKSVILLE	6	13	36	22	42	24	12	265
WARRENSBURG	11	20	42	24	34	23	15	207
CAPE GIRARDEAU	16	37	57	19	24	14	7	222
SPRINGFIELD	26	50	73	14	13	8	4	286
MARYVILLE	5	16	36	20	44	31	17	166
100%								

TABLE 30. "IS TEACHING THE BEST-PAID EMPLOYMENT YOU COULD CONVENIENTLY UNDERTAKE?" ²

	<i>Collegiate Men</i>	<i>Collegiate Women</i>	<i>Secondary Men</i>	<i>Secondary Women</i>	<i>Total</i>
Reporting "Yes"	43%	84%	51%	88%	74%

TABLE 31. "ARE YOU SELF-DEPENDENT IN PAYING FOR YOUR EDUCATION?" ³

	<i>Collegiate Men</i>	<i>Collegiate Women</i>	<i>Secondary Men</i>	<i>Secondary Women</i>	<i>Total</i>
	%	%	%	%	%
Reporting "Yes"	64	31	42	29	36
Reporting "No"	27	63	52	64	57
Reporting "Partly"	9	6	6	7	7

TABLE 32. SIZE OF FAMILY ⁴

	KIRKSVILLE	WARRENSBURG	C. GIRARDEAU	SPRINGFIELD	MARYVILLE	Men	TOTALS Women	Both
<i>No. of children</i>	%	%	%	%	%	%	%	%
One	5	6	4	3	3	5	4	5
Two-Four	40	38	31	25	38	31	36	35
Five-Eight	41	43	45	48	45	44	45	44
Nine-Eleven	13	11	18	19	12	17	13	14
Twelve or more	1	2	2	5	2	3	2	2
	100	100	100	100	100	100	100	100

¹ Proportions based on student cards; 60 per cent of the men and 41 per cent of the women replied to the question. See page 402, par. 5.

² Question answered on 87 per cent of the student cards. See page 402, par. 5.

³ Question answered on 99 per cent of the student cards from Kirksville, Warrensburg, and Maryville only. See page 402, par. 5.

⁴ Question answered on 99 per cent of the student cards. See page 402, par. 5.

TABLE 33. OTHER TEACHERS IN THE FAMILY¹

	KIRKSVILLE	WARRENSBURG	C. GIRARDEAU	SPRINGFIELD	MARYVILLE	Men	TOTALS Women	Both
	%	%	%	%	%	%	%	%
None	37	41	36	34	44	35	39	38
One or Two	48	48	48	45	48	49	47	47
Three or more	15	11	16	21	8	16	14	15
	100	100	100	100	100	100	100	100

TABLE 34. "HOW MANY OF YOUR FAMILY EVER ATTENDED A NORMAL SCHOOL?"²

	KIRKSVILLE	WARRENSBURG	C. GIRARDEAU	SPRINGFIELD	MARYVILLE	Men	TOTALS Women	Both
	%	%	%	%	%	%	%	%
None	26	35	34	40	43	31	36	35
One	25	23	25	21	25	23	24	24
Two	23	20	23	18	15	22	20	20
Three or more	26	22	18	21	17	24	20	21
	100	100	100	100	100	100	100	100

TABLE 35. HIGH SCHOOL ATTENDANCE³

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
	%	%	%	%	%	%
Any high school for any period						
Collegiate Men	56	73	64	62	68	65
Collegiate Women	75	86	77	80	86	81
Secondary Men	36	54	36	51	65	47
Secondary Women	50	63	34	59	61	55
First class high school for four years						
Collegiate Men	19	43	19	20	40	28
Collegiate Women	40	64	43	54	55	53

TABLE 36. RATINGS, BY THEIR SCHOOL PRINCIPALS, OF 871 GRADUATES FROM FIFTY-EIGHT MISSOURI HIGH SCHOOLS OF THE FIRST CLASS

Showing the relative proportions of different grades of ability in studies and of different grades of personal quality found in the various occupation groups of these graduates immediately after leaving the high school

(For the discussion of these tables, see page 121)

A. Ratings of Ability distributed among Occupations

	Number and Proportion in various Occupations		Rated "A" (excellent) in Studies		Rated "A" (excellent) in Personality		Rated "B" (medium) in Studies		Rated "B" (medium) in Personality		Rated "C" (poor) in Studies		Rated "C" (poor) in Personality	
	Men	Women	Men	Wo.	Men	Wo.	Men	Wo.	Men	Wo.	Men	Wo.	Men	Wo.
At College or Univ.	No. 159	% 47	No. 104	% 20	% 47	% 23	% 65	% 30	% 50	% 20	% 41	% 16	% 36	% 5
At Normal School	9—	2.5	39—	7	4	23	1	8	2	8	2	4	3	5
Teaching	30—	9	190—	36	15	45	11	36	6	33	9	40	6	21
In Business	44—	13	9—	2	10	1	9	<1	14	2	13	2	16	5
At Home	26—	7.5	123—	23	12	14	5	13	3	27	4	23	13	38
Other Occupations	72—	21	66—	12	12	10	9	13	25	11	29	11	27	22
	340—100	531—100	100	100	100	100	100	100	100	100	100	100	100	100
			(101) ⁴	(203)	(106)	(187)	(176)	(272)	(157)	(238)	(63)	(56)	(77)	(106)

¹ Question answered on 97 per cent of the student cards. See page 402, par. 5.

² Question answered on 98 per cent of the student cards. See page 402, par. 5.

³ Proportions based on entire enrolment for 1913-14.

⁴ Figures in parenthesis indicate the numbers on which the percentages are based.

B. Ratings of Ability distributed within Occupational Groups

	At College		At Normal School		Teaching		In Business		At Home		Other Occupations		Total	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Rating in Studies	(159) ¹	(104)	(9)	(39)	(30)	(123)	(44)	(9)	(26)	(123)	(72)	(66)	(340)	(531)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	A 30	44	A 44.5	39	A 50	48	A 23	11	A 46	34	A 17	32	A 29	38
	B 55	53	B 44.5	56	B 37	46	B 54	56	B 23	59	B 60	45	B 52	51
Rating in Personality	C 15	3	C 11	5	C 13	6	C 23	33	C 31	17	C 23	23	C 19	11
	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	A 43	54	A 11	38	A 37	35	A 23	11	A 19	20	A 14	36	A 31	35
	B 41	56	B 67	49	B 47	50	B 48	44.5	B 23	45	B 62	40	B 46	45
	C 16	10	C 22	13	C 16	15	C 29	44.5	C 58	35	C 24	24	C 23	20
	100	100	100	100	100	100	100	100	100	100	100	100	100	100

TABLE 37. COMPARISON OF COLLEGIATE RATINGS AT NORMAL SCHOOLS OF STUDENTS PREPARED AT HIGH SCHOOLS WITH RATINGS OF STUDENTS PREPARED AT THE NORMAL SCHOOLS
(For the discussion of this table, see page 122)

	KIRKSVILLE		WARRENSBURG		CAPE GIRARDEAU		SPRINGFIELD	
	N. S.	H. S.	N. S.	H. S.	N. S.	H. S.	N. S.	H. S.
Graduates in 1915	8u+	15u+	8u+	15u+	8u+	15u+	8u+	15u+
Sixty-hour Class								
Number of cases	9	27	17	157	25	49	24	38
	%	%	%	%	%	%	%	%
Proportion of "A's"	23	29	4	2	12	5	10	8
"B's"	60	57	23	22	29	24	45	42
"C's"	17	14	62	71	42	54	45	50
"D's"	2		11	5	17	17	2	
Ninety-hour Class ³								
Number of cases	25	23						
	%	%						
Proportion of "A's"	41	42						
"B's"	49	50						
"C's"	10	8						

TABLE 38. PROPORTION OF STUDENTS REPORTING TEACHING EXPERIENCE⁴

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
	%	%	%	%	%	%
Collegiate Men	68	64	61	71	59	65
Collegiate Women	76	65	54	66	56	65
Secondary Men	27	41	45	52	42	42
Secondary Women	51	50	58	56	53	53
Total	57	58	54	59	52	57

TABLE 39. DISTRIBUTION OF TEACHING EXPERIENCE⁴

	Total reporting Experience	1-5 mos.	6-9 mos.	More than 1 year	More than 2 years	More than 3 years	More than 4 years	More than 5 years	More than 10 years
	%	%	%	%	%	%	%	%	%
Collegiate Men	65	2	13	50	39	29	22	16	5
Collegiate Women	65	2	15	43	35	26	13	13	3
Secondary Men	42	2	11	29	19	13	9	6	2
Secondary Women	53	3	12	33	26	13	13	9	2
Total	57	3	13	41	29	21	15	11	3
100%									

¹ Figures in parenthesis indicate the numbers on which the percentages are based.

² At Kirksville and Springfield passing students are rated in three groups only.

³ Owing to the small numbers in the sixty-hour class at Kirksville, the ninety-hour graduates were studied also.

⁴ Proportions based on total enrolment for 1913-14.

TABLE 40. "DO YOU PLAN TO TEACH PERMANENTLY?"¹

	KIRKSVILLE	WARRENSBURG	MARYVILLE	TOTAL
Reporting "No"	%	%	%	%
Collegiate Men	70	75	61	71
Collegiate Women	53	49	60	52
Secondary Men	90	77	73	82
Secondary Women	60	47	52	53
Total Men	82	77	70	78
Total Women	57	48	56	52

TABLE 41. KIND OF TEACHING SOUGHT BY THOSE INTENDING TO TEACH IMMEDIATELY UPON LEAVING THE NORMAL SCHOOL¹

	High School and Supervision	Graded Elementary School	Rural Elementary School
	%	%	%
Collegiate Men	82	5	13
Collegiate Women	45	46	9
Secondary Men	34	7	59
Secondary Women	18	27	55
Total Men	55	6	39
Total Women	29	36	35

TABLE 42. PROGRAMS SCHEDULED BY ALL COLLEGIATE STUDENTS IN 1913-14

<i>Periods per week</i>	<i>Less than</i>	<i>Less than</i>	<i>Less than</i>	<i>More than</i>	<i>More than</i>	<i>More than</i>	<i>More than</i>	<i>More than</i>	<i>Total</i>
	15	20	20-23	23	25	28			
KIRKSVILLE	%	%	%	%	%	%			
Regular Session	10	31	62	7	1	—			702
Summer Session	10	30	62	8	1	<1			539
		100%							
WARRENSBURG									
Regular Session	4	11	84	5	—	—			1148
Summer Session	4	16	82	2	—	—			852
		100%							
SPRINGFIELD									
Regular Session	15	31	47	22	6	1			761
Summer Session	13	34	47	19	8	4			605
		100%							
MARYVILLE									
Regular Session	5	21	75	4	1	—			360
Summer Session	10	26	69	5	1	—			172
		100%							
<i>Periods per week</i>	<i>Less than</i>	<i>Less than</i>	<i>Less than</i>	<i>More than</i>	<i>More than</i>	<i>More than</i>	<i>More than</i>	<i>More than</i>	<i>Total</i>
	13	14	15	15-16	16	17	18	19	20
CAPE GIRARDEAU	%	%	%	%	%	%	%	%	%
Regular Session	12	16	21	19	60	40	20	9	3
Summer Session	26	42	62	28	10	6	3	2	1
		100%							

¹ Proportions based on student cards from Kirksville, Warrensburg, and Maryville only; the question was added to the card after the other schools had reported. See page 402, par. 5.

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TABLE 43. PROGRAMS SCHEDULED BY ALL SECONDARY STUDENTS IN 1913-14

Periods per week	Less than 15	Less than 20	20-23	More than 23	More than 25	More than 28	More than 30	TOTAL
KIRKSVILLE	%	%	%	%	%	%	%	
Regular Session	8	38	59	3	<1			978
Summer Session	8	42	56	2	<1			440
		100%						
WARRENSBURG								
Regular Session	3	8	90	2				841
Summer Session	2	13	86	1				554
		100%						
CAPE GIRARDEAU								
Regular Session	5	14	22	64	41	15	4	686
Summer Session	6	31	39	30	16	8	4	309
		100%						
SPRINGFIELD								
Regular Session	31	51	39	10	2	<1	<1	992
Summer Session	21	44	44	12	5	2	1	896
		100%						
MARYVILLE								
Regular Session	6	22	75	3	1			397
Summer Session	7	23	75	2	<1			342
		100%						

TABLE 44. DISTRIBUTION OF STUDENT GRADES, 1913-14¹

	KIRKSVILLE			WARRENSBURG			C. GIRARDEAU			SPRINGFIELD			MARYVILLE			TOTAL		
	Coll.	Sec.	Tot.	Coll.	Sec.	Tot.	Coll.	Sec.	Tot.	Coll.	Sec.	Tot.	Coll.	Sec.	Tot.	Coll.	Sec.	Tot.
Passing Grades A	23	16	20	3	2	2	9	6	8	32	25	29	5	3	4	94	90	98
B	55	44	51	21	16	19	27	18	24	47	44	46	32	33	32			
C	14	23	18	59	57	59	45	44	45	9	13	11	51	46	48			
D ²				10	15	12	10	14	11				4	8	7			
Conditioned	2	2	2	3	3	3	4	9	6	1	3	2	1	1	1			
Half Credit										2	3	2						
Failed	1	7	3	2	5	3	2	6	3	3	6	4	2	3	3	2	5	3
Dropped	5	8	6	2	2	2	3	3	3	6	6	6	5	6	5	4	5	4
Total Grades	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	11,044			14,854			10,834			15,094			5,384			57,210		

TABLE 45. SEASONAL VARIATION IN COLLEGIATE STUDENT FAILURE, 1913-14

	KIRKSVILLE	WARRENSBURG	CAPE GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL
Fall	2.1	1.9	2.8	1.7	1.6	2.1
Winter	2	2.1	1.3	3	2.2	2.1
Spring	1.4	2.3	1.4	6.4	3.4	3
Summer	.6	1.9	1.5	.8	.7	1.2

¹ These data cover all the work done during the entire year 1913-14 except at Warrensburg, where, owing to the destruction of the earlier records, the grades for 1915-16 were used.

² Kirksville and Springfield group their passing grades in three instead of four divisions.

TABLE 46. SIZE OF NORMAL SCHOOL CLASSES, 1915-16

	Secondary								Collegiate												
	Less than 5	Less than 10	Less than 15	15-20	More than 20	More than 30	More than 40	More than 50	Less than 3	Less than 5	Less than 10	Less than 15	15-20	More than 20	More than 30	More than 40	More than 50				
KIRKSVILLE	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%				
Reg. Sess.	3	16	25	28	47	13	3	2	3	12	89	58	12	30	13	5	2				
Sum. Sess.	3	3	8			27	65	45	33	20	—	1	17	26			14	60	46	25	17
	100%								100%												
WARRENSBURG	—	20	41	17	42	10	3	1	1	5	30	53	19	28	10	2	1				
Reg. Sess.	—	4	15	21	64	32	11	3	—	1	10	18	16	66	41	17	4				
Sum. Sess.	3	4	15			21	64	32	11	3	—	1	10	18			16	66	41	17	4
	100%								100%												
CAPE GIRARDEAU	—	6	23	23	54	25	10	4	2	13	37	54	14	32	14	8	4				
Reg. Sess.	—	9	12	9	79	55	29	7	2	11	30	41	12	47	31	20	6				
Sum. Sess.	2	9	12			9	79	55	29	7	2	11	30	41			12	47	31	20	6
	100%								100%												
SPRINGFIELD	3	12	28	23	49	14	2	—	3	9	30	53	15	32	15	5	1				
Reg. Sess.	—	8	16	18	66	25	2	2	—	1	15	36	20	44	29	12	4				
Sum. Sess.	—	8	16			18	66	25	2	2	—	1	15	36			20	44	29	12	4
	100%								100%												
MARYVILLE	6	28	56	16	28	14	2	—	3	16	48	70	14	16	6	3	1				
Reg. Sess.	4	8	23	22	55	33	10	4	4	12	46	67	5	28	21	19	12				
Sum. Sess.	4	8	23			22	55	33	10	4	4	12	46	67			5	28	21	19	12
	100%								100%												
TOTALS	2	16	34	21	45	15	4	1	2	10	36	56	15	29	12	5	2				
Reg. Sess.	2	7	16	19	65	34	12	5	1	4	21	34	14	52	36	19	9				
Sum. Sess.	2	13	27	21	52	22	7	3	2	8	31	49	15	36	20	10	4				
Both	2	13	27			21	52	22	7	3	2	8	31	49			15	36	20	10	4
	100%								100%												

TABLE 47. PROPORTIONS OF LARGE AND SMALL CLASSES IN VARIOUS DEPARTMENTS, 1915-16

Secondary Classes					
Regular Session			Summer Session		
Less than ten	%	More than thirty	Less than ten	%	More than thirty
Latin	57	Education	Latin	76	Education
Household Arts	36	History	German	40	History
German	29	All Subjects	All Subjects	7	English
Biology	27				Physics
Geography	20				Geography
All Subjects	16				Biology
					Agriculture
					Mathematics
					Chemistry
					All Subjects

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TABLE 47 (continued). PROPORTIONS OF LARGE AND SMALL CLASSES

Collegiate Classes							
Regular Session				Summer Session			
Less than ten		More than thirty		Less than ten		More than thirty	
	%		%		%		%
Latin	88	Library Science	75	Latin	92	Geography	86
French	70	Education	27	German	69	Library Science	60
German	60	All Subjects	12	Spanish	60	Education	56
Mathematics	54			French	50	Biology	43
Spanish	50			Biology	43	English	42
Agriculture	44			Library Science	40	History	31
Household Arts	44			Household Arts	35	Agriculture	26
Physics	43			Physics	27	Chemistry	26
Geography	42			Chemistry	26	All Subjects	36
Chemistry	40			Mathematics	23		
Biology	35			Agriculture	22		
History	29			All Subjects	21		
English	27						
Library Science	25						
Education	20						
All Subjects	36						

TABLE 48. NUMBER OF FOUR-YEAR BACHELOR'S DEGREES FROM
MISSOURI STATE NORMAL SCHOOLS

	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	TOTAL
KIRKSVILLE	1	1	0	4	6	7	16	22	29	32	45	163
WARRENSBURG	0	0	2	2	5	2	1	3	8	12	20	55
CAPE GIRARDEAU	0	3	10	1	5	8	5	4	5	13	9	63
SPRINGFIELD	0	0	0	0	0	0	1	0	9	9	10	29
MARYVILLE	0	0	0	0	0	0	0	0	0	0	12	12
TOTAL	1	4	12	7	16	17	23	29	51	66	96	322

TABLE 49. SUBSEQUENT EMPLOYMENT OF RECIPIENTS OF NORMAL SCHOOL CERTIFICATES IN 1915¹

	KIRKSVILLE	WARRENSBURG	C. GIRARDEAU	SPRINGFIELD	TOTAL
	Men W'o. Both	Men W'o. Both	Men W'o. Both	Men W'o. Both	Men W'o. Both
Number of Certificates issued	102 236 338 % % %	127 451 578 % % %	101 261 362 % % %	95 296 391 % % %	425 1244 1669 % % %
Teaching	72 69 70	71 68 69	75 77 77	84 79 80	75 73 73
Students	23 17 19	12.5 14 13	16 10 12	12 9 9	16 12.5 13
Business, At Home, etc.	4 11 9	8.5 7 8	5 7 6	4 9 8	5 8.5 8
No Record	1 3 2	8 11 10	4 6 5	— 3 3	4 6 6
	100 100 100	100 100 100	100 100 100	100 100 100	100 100 100
Distribution of those Teaching					
Rural Schools	22 29 27	36 41 40	36 19 23	43 37 38	34 33 33
Elementary Grades	8 37 29	22 46 41	24 67 55	26 54 47	20 51 43
High Schools	28 26 26	36 11 16	25 12 16	22 9 12	28 13 17
Normal School or College	1 2 2	2 <1 <1	1 1 1	1 <1 1	2 1 1
Supervision	31 1 10	2 — 1	13 — 4	8 — 2	13 <1 4
Other Teaching	10 5 6	2 2 2	1 1 1	— <1 <1	3 2 2
	100 100 100	100 100 100	100 100 100	100 100 100	100 100 100

¹ This information was not obtainable from Maryville.

TABLE 50. DISTRIBUTION OF RECIPIENTS OF DIPLOMAS OR CERTIFICATES IN 1915 BY CLASSES AMONG THEIR VARIOUS SUBSEQUENT OCCUPATIONS

CURRICULUM	Four-Year Collegiate	Three-Year Collegiate	Two-Year Collegiate	One-Year Collegiate	Rural Certificate	Total
Teaching in:	%	%	%	%	%	%
Rural Schools	—	2.5	11	32	84	34
Graded Elementary Schools	11	21	56	56	16	44
High Schools	53	59	28	9	—	17
Normal Schools or Colleges	17	2.5	1	<1	—	1
Other Positions	—	1	1	1	—	1
Superintendents	19	14	3	2	<1	3
	100	100	100	100	100	100
(Number teaching)	(36)	(89) ¹	(338) ¹	(517) ¹	(245)	(1225) ¹
Total Teaching	74	74	75	72	74	73
Students	20	10	13	16	8	13
Others	4	13	10	5	9	8
No Record	2	3	2	7	9	6
	100	100	100	100	100	100
(Diplomas or certificates issued)	(49)	(121)	(449)	(720)	(330)	(1669)

§ VI. TEACHING POPULATION²

TABLE 51. TEACHERS IN GRADED ELEMENTARY SCHOOLS, 1915. DURATION OF NORMAL SCHOOL ATTENDANCE

	KIRKSVILLE	WARRENSBURG	C. GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL	
Terms:	%	%	%	%	%	No.	%
One	23	27	20	23	19	364	23
Two	11	16	15	20	16	253	16
Three	15	15	15	19	22	256	17
Four	15	12	6	14	10	189	12
Five	9	5	8	7	5	103	7
Six	8	8	10	6	10	122	8
One year or more	66	57	65	57	65	935	60
Two years or more	27	25	36	17	28	387	25
Three years or more	11	11	15	4	9	149	9
Four years or more	7	5	7	1	5	77	5
TOTAL NUMBER	235	529	265	421	102	1552	

TABLE 52. TEACHERS IN GRADED ELEMENTARY SCHOOLS, 1915. PROPORTION OF TERMS SPENT AT EACH NORMAL SCHOOL IN COLLEGIATE WORK

	KIRKSVILLE		WARRENSBURG		C. GIRARDEAU		SPRINGFIELD		MARYVILLE		TOTAL	
Teachers in	No. of coll.	%	No. of coll.	%	No. of coll.	%	No. of coll.	%	No. of coll.	%	No. of coll.	%
Larger systems ³	40	44 ⁴	275	75	29	78	559	82	21	64	924	76
Rest of state	450	57	910	66	432	46	306	49	199	59	2297	57
TOTAL	490	56	1185	68	461	48	865	66	220	59	3221	61

TABLE 53. TEACHERS IN GRADED ELEMENTARY SCHOOLS, 1915. DISTRIBUTION OF TERMS OF COLLEGIATE NORMAL SCHOOL ATTENDANCE

	KIRKSVILLE	WARRENSBURG	C. GIRARDEAU	SPRINGFIELD	MARYVILLE	TOTAL	
Teachers in	%	%	%	%	%	No.	%
Larger systems ³	4	30	3	61	2	924	100
Rest of state	19.5	39.5	19	13	9	2297	100
TOTAL	15	37	14	27	7	3221	100

¹ Three, seven, twelve, and twenty-two belonging respectively to the three-year, two-year, one-year, and total groups failed to define their positions, and are therefore included in the sub-totals but not in the distribution.² See page 405. ³ See page 364, note 1. ⁴ The remaining terms—56 per cent—were devoted to secondary work.

TABLE 54. TEACHERS IN GRADED ELEMENTARY SCHOOLS, 1915. NUMBER REPORTING COLLEGIATE WORK AT NORMAL SCHOOLS WITH AVERAGE NUMBER OF TERMS OF ATTENDANCE

Teachers in	KIRKSVILLE		WARRENSBURG		C. GIRARDEAU		SPRINGFIELD		MARYVILLE		TOTAL	
	No.	No. of terms	No.	No. of terms	No.	No. of terms	No.	No. of terms	No.	No. of terms	No.	No. of terms
Larger systems	9	4.4	89	3.1	8	3.6	157	3.6	6	3.5	269	3.4
Rest of state	123	3.7	264	3.4	136	3.2	112	2.7	50	4	685	3.4
TOTAL	132	3.7	353	3.4	144	3.2	269	3.2	56	3.9	954	3.4

TABLE 55. TEACHERS IN GRADED ELEMENTARY SCHOOLS, 1915. HIGH SCHOOL PREPARATION OF 1556 TEACHERS WHO HAD ATTENDED STATE NORMAL SCHOOLS

	<i>Less than one year</i>	<i>Less than two years</i>	<i>Less than three years</i>	<i>Less than four years</i>	<i>Four years or more</i>
	%	%	%	%	%
KIRKSVILLE	19	35	46	55	45
WARRENSBURG	10	23	32	44	56
CAPE GIRARDEAU	17	35	50	63	37
SPRINGFIELD	6	19	29	43	57
MARYVILLE	16	28	36	54	46
TOTAL	12	26	36	49	61

TABLE 56. HIGH SCHOOL TEACHERS, 1915 (EXCEPT ST. LOUIS AND KANSAS CITY) DISTRIBUTION OF COLLEGIATE TRAINING

	<i>1st Class High Schools</i>			<i>2d. & 3d Class High Schools</i>			<i>Total, 1st, 2d & 3d Class High Schools</i>			<i>Unclassified High Schools</i>		
	Men %	Women %	Both %	Men %	Women %	Both %	Men %	Women %	Both %	Men %	Women %	Both %
Colleges or universities only ¹	55	52	53	32	26	28	50	46	47	9	27	20
Mo. State University	39	36	37	31	21	23	37	33	34	9	14	12
Mo. State University only	8	14	13	8	6	7	8	12	11	5	5	5
Mo. State Normal Schools only	13	13	13	27	34	32	16	18	17	36	38	37
Colleges or universities and Mo. State Normal Schools	25	29	28	22	30	28	24	29	28	14	19	17
Secondary work only at high school, academy, or normal school	7	6	6	19	10	12	10	7	8	41	16	26
TOTAL	(212) ² 100	(626) ² 100	(838) ² 100	(69)100	(177) ² 100	(236) ² 100	(271)100	(808) ² 100	(1074)100	(22)100	(37)100	(59)100

TABLE 57. HIGH SCHOOL TEACHERS, 1915 (EXCEPT ST. LOUIS AND KANSAS CITY) DISTRIBUTION OF NORMAL SCHOOL TRAINING³

	<i>1st Class High Schools</i>			<i>2d & 3d Class High Schools</i>			<i>Total 1st, 2d & 3d Class High Schools</i>			<i>Unclassified High Schools</i>		
	Men %	Women %	Both %	Men %	Women %	Both %	Men %	Women %	Both %	Men %	Women %	Both %
KIRKSVILLE	25	27	27	24	18	20	25	24	25	16	27	22
WARRENSBURG	36	44	42	17	49	42	30	46	42	21	23	22
CAPE GIRARDEAU	19	9	11	20	12	14	19	10	12	37	19	27
SPRINGFIELD	14	16	15	34	18	21	21	16	17	21	15.5	18
MARYVILLE	6	4	5	5	8	3	5	4	4	5	15.5	11
TOTAL	(91) ² 100	(298) ² 100	(389)100	(41)100	(132) ² 100	(173)100	(132)100	(430) ² 100	(562)100	(19)100	(26)100	(45)100

¹ Includes three per cent who did secondary but no collegiate work at a normal school.² Figures in parenthesis indicate the total number on which the percentage is based.³ Includes all secondary and collegiate work.

TABLE 58. SUBJECTS TAUGHT BY MISSOURI HIGH SCHOOL TEACHERS AND SUPERVISORS, 1916-17¹

FIRST CLASS SCHOOLS					Men	Women	Both
<i>One Subject</i>				Math., History & Science	5 (2)	1	6
English	26 (5) ³	137 (9)	163	Math., Sci. & Com. Subjects	5 (4)		5
Mathematics	51 (21)	63 (3)	114	Fifty-three other combinations	36 (26)	45 (13)	81
History	37 (12)	76 (2)	113	Sub-total	95 (76)	85 (19)	180
Household Arts		69	69	<i>Four Subjects</i>			
Science	55 (10)	14	69	Six combinations	7 (6)	2	9
Commercial Subjects	29 (5)	38	67	<i>Five Subjects</i>			
Manual Training	54		54	Two combinations	1 (1)	1	2
Music	9	33	42	SECOND AND THIRD CLASS SCHOOLS			
Teacher Training	27 (24)	13 (1)	40	<i>One Subject</i>			
Latin	9 (2)	28 (1)	37	Household Arts		7	7
German	4 (2)	17	21	Mathematics	2 (2)	4	6
Drawing	4	15	19	English	1	5	6
Physical Culture	10	7	17	History	2 (1)	4 (1)	6
Five other subjects ²	8 (3)	8	16	Latin		5	5
Sub-total	323 (84)	518 (16)	841	Four other subjects	2	5	7
<i>Two Subjects</i>				Sub-total	7 (3)	30 (1)	37
English & Latin	2	52 (8)	54	<i>Two Subjects</i>			
English & History	6 (1)	48 (3)	54	English & History	13 (8)	40 (9)	53
Agriculture & Science	47 (33)	2	49	English & Latin		25 (8)	25
Latin & German	3	37 (2)	40	History & Agriculture	15 (13)	2 (1)	17
Mathematics & Science	26 (16)	12 (1)	38	Mathematics & History	6 (5)	6 (3)	12
Mathematics & History	13 (10)	16 (3)	29	English & Mathematics	2 (1)	12 (4)	14
Mathematics & Latin	6 (3)	21 (2)	27	Mathematics & Agriculture	8 (7)		8
History & Latin	7 (3)	19 (3)	26	Mathematics & Science	4 (3)	4 (1)	8
English & Mathematics	2	20 (1)	22	History & Latin	1 (1)	5 (3)	6
English & German		15 (1)	15	Mathematics & Latin	1 (1)	5 (2)	6
English & Science	6 (3)	7	13	History & Science	4 (3)	1	5
History & Agriculture	10 (10)	3 (2)	13	Eighteen other combinations	10 (7)	18 (4)	28
History & German	1	12 (1)	13	Sub-total	64 (49)	113 (35)	182
History & Household Arts		12	12	<i>Three Subjects</i>			
English & Teacher Training		12	12	Mathematics, Science & Agri.	32 (31)	1	33
Mathematics & Agriculture	10 (9)	1	11	English, History & Latin	3 (2)	29 (12)	32
Mathematics & Com Subjects	8 (4)	3 (1)	11	Math., Agriculture & History	24 (24)	1	25
Math. & Manual Training	1 (1)	9 (2)	10	English, Mathematics & Latin	3 (3)	9 (2)	12
Agri. & Teacher Training	7 (5)	1	8	History, Science & Agriculture	8 (8)	1 (1)	9
English & Household Arts		8	8	English, Math. & Agriculture	7 (7)	2 (1)	9
History & Science	7 (5)	1 (1)	8	Math., Agriculture & Latin	7 (7)	1 (1)	8
Mathematics & German		8 (1)	8	English, Math. & Science	2 (1)	4 (1)	6
Math. & Manual Training	8 (3)		8	Mathematics, History & Latin	3 (3)	3	6
Teacher Training & History	4 (2)	3	7	Mathematics, Science & Latin	2 (2)	3 (1)	5
German & Teacher Training		6 (1)	6	Forty-eight other combinations	34 (27)	23 (9)	62
Math. & Household Arts		5	5	Sub-total	125 (115)	82 (28)	207
Fifty-six other combinations	30* (12)	53 (3)	83	<i>Four Subjects</i>			
Sub-total	204 (120)	386 (37)	590	Twenty-seven combinations	55 (52)	8 (5)	63
<i>Three Subjects</i>				<i>Five Subjects</i>			
Math., Science & Agriculture	31 (28)	6 (1)	37	Eight combinations	58 (55)	7 (7)	65
History, Science & Agriculture	13 (12)	2 (2)	15	<i>Six Subjects</i>			
History, Latin & German		11 (1)	11	Three combinations	4 (3)		4
English, Latin & German	3 (2)	8 (1)	11				
English, Math. & History		8	8				
Math., History & Latin	2 (2)	4 (1)	6				

¹ Data are complete for all classified high schools in the state as given in the state high school directory for 1916-17.² Subjects or subject combinations offered by fewer than five teachers each are not listed.³ Figures in parenthesis give the number of principals or superintendents teaching the subject. These are included in the main figure.

§ VII. BIENNIAL STATE EXPENDITURES FOR NORMAL SCHOOLS, 1871-1918¹

Year	KIRKSVILLE		WARRENSBURG		CAPE GIRARDEAU		SPRINGFIELD		MARYVILLE		Total, All Schools	
	Support	Buildings, Repairs, Improve., Incid.	Support	Buildings, Repairs, Improve., Incid.	Support	Buildings, Repairs, Improve., Incid.	Support	Buildings, Repairs, Improve., Incid.	Support	Buildings, Repairs, Improve., Incid.	Support	Buildings, Repairs, Improve., Incid.
1871-1872	10,000	33,680.17	10,000								20,000	33,680.17
1873-1874	13,888.87	15,991.52	20,000		5,000						43,888.87	15,991.52
1875-1876	20,000		20,000		20,000						60,000	
1877-1878	15,000		15,000		15,000						45,000	
1879-1880	15,000		15,000		15,000						45,000	
1881-1882	20,000		20,000	10,000	20,000						60,000	10,000
1883-1884	20,000	15,965.80	20,000	15,000	20,000						60,000	43,749.80
1885-1886	20,000		20,000	30,000	20,000						70,000	30,000
1887-1888	25,000	3,118.50	25,000		20,000	1,000					69,960	4,118.50
1889-1890	25,000	2,573.00	25,000		19,960	3,900					74,500	6,773
1891-1892	25,000		27,500		22,000	1,018.80					74,500	1,018.80
1893-1894	25,000	1,405.50	27,500		22,000	5,000					74,500	6,405.50
1895-1896	25,000	5,248.42	27,500	35,000	22,000	5,000					70,500	45,248.42
1897-1898	27,500	5,289.97	30,000	4,499.24	22,000	2,500					82,500	9,892.36
1899-1900	27,500	3,392.66	33,000	2,499.70	22,000	3,500					103,510	30,564.61
1901-1902	33,000	5,550.00	42,610	1,564.61	28,200	23,450					176,848.68	168,267.55
1903-1904	50,000	11,033.01	80,548.68	23,193.06	46,300	124,042.48					176,848.68	384,205.58
1905-1906	90,000	69,973.99	101,721.32	98,068.07	88,600	176,143.52					376,296.11	833,865.07
1907-1908	95,905	4,000	102,550.06	25,272.68	88,300	39,000.00	45,000	141,705.97	47,141.05	123,886.42	589,716.33	895,636.43
1909-1910	140,891.99	34,260	162,314.62	46,718.68	131,884.50	38,000.00	98,659.32	115,294.03	59,966.00	161,363.72	601,318.51	241,426.76
1911-1912	148,458.50	48,800	158,125.00	31,621.23	123,188.12	50,000.00	96,599.40	73,759.54	68,947.49	36,805.99	751,544.00	108,009.17
1913-1914	176,644	27,600	176,000.00	27,464.00	150,000.00	9,000.00	160,000.00	15,903.56	90,000.00	28,041.61	803,820.00	894,642.38
1915-1916	190,000	31,978	190,000.00	280,000.00	175,000.00	24,000.00	130,000.00	8,000.00	118,820.00	51,064.38	870,000.00	120,448.00
1917-1918	190,000	9,948	200,000.00	92,500.00	175,000.00		175,000.00	3,000.00	130,000.00	15,000.00	5,473,023.82	2,345,732.83
Sub-Total	1,437,088.36	329,707.54	1,638,369.68	723,321.27	1,277,432.62	518,838.80	705,258.72	357,703.10	514,874.54	416,162.12	7,818,756.65	
Total	1,766,796.90		2,261,690.85		1,796,271.42		1,062,961.82		931,036.06			

¹ Data drawn from the reports of the state auditor or furnished by him.

§ VIII. THE JUDGMENT OF EXPERIENCED TEACHERS

AS TO THE VALUE OF VARIOUS ELEMENTS IN THEIR TRAINING

IN order to discover, if possible, the judgment of experienced Missouri teachers as to the elements in their preparation to which they were chiefly indebted, a list of questions was sent to a group of teaching graduates both of the normal schools and of the university. One hundred sixty-three responded,¹ of whom thirty-six had taught only in elementary schools, twenty-nine only in high schools, and ninety-five in both; three gave no record of their service. The range of experience was from three to twenty-five years, with a median of seven years. It seemed advisable to present all the replies in one group. Except in certain respects, noted below, the reports from the graduates of the university agreed approximately with those from the normal schools. It should be remembered further that the training in either institution probably varied quite as much at different periods as the form of training in the normal schools differed from that in the university at any given time. Consequently only the most general inferences may be drawn from the results.

In the following account the wording of the questionnaire is retained, but the order of topics is that of the choice expressed in the replies.

I. Which kind of preparation has contributed more to your success as a teacher:

1. Preparation in various ways in the light of experience (91), or
2. Training received in normal school or college before taking a regular position (63)

NOTE: On this question the decision in favor of the first was reversed by the university graduates considered alone to a majority of one in favor of the second. The votes at Maryville and Warrensburg were tied.

II. Which group of courses has been of greater benefit to you:

1. Academic courses in subject-matter to be taught (95), or
2. Professional courses in the theory, history, and practice of education (63)

NOTE: Among votes from the university and from Kirksville the proportion was 3 to 1. Maryville alone reversed the conclusion, 5-9.

III. Number the following courses in the order of their practical helpfulness in your present work: Ranking (see Note)

- | | |
|---|-------|
| 1. Courses in special method in subjects you are teaching | 1.805 |
| 2. Courses in general method or principles of teaching | 1.664 |
| 3. Courses in psychology | 1.591 |
| 4. Practice teaching with supervision | 1.444 |
| 5. Courses in school administration | 1.442 |
| 6. Courses in school management | 1.351 |
| 7. Observation of teaching with discussion | 1.270 |
| 8. Courses in particular city or state courses of study | .248 |
| 9. Courses in history of education | .168 |
| 10. Other professional courses | .000 |

NOTE: See "The Technique of Combining Incomplete Judgments of the Relative Positions of N Facts made by N Judges," by Professor E. L. Thorndike in the *Journal of Philosophy, Psychology, and Scientific Methods*, April 13, 1916, page 197. The column at the right expresses the distance in "Q" units of each subject from the lowest. (See Thorndike's *Mental and Social Measurements*, Table 59.)

IV. Number the following possible elements of training as in III Ranking

- | | |
|---|-------|
| 1. Self-criticism as a result of independent experience | 3.711 |
| 2. Influence of example of particular teachers with whom you have studied | 3.252 |
| 3. Criticism from superintendents, principals, or other supervisors | 2.451 |
| 4. Books on teaching which you have read independently | 2.029 |
| 5. Periodicals for teachers | 1.210 |
| 6. Work in literary or debating societies | .981 |
| 7. Any other element especially important to you ² | .640 |
| 8. Work in county institutes | .000 |

¹ The replies were distributed as follows among the different schools: Kirksville, 25; Warrensburg, 26; Cape Girardeau, 34; Springfield, 35; Maryville, 14; University of Missouri, 29.

² Visiting schools, travel, school surveys, teachers associations, conferences with teachers or parents or pupils, daily papers, club work, family traditions, outside interests.

§ IX. THE RESULTS OF STANDARD TESTS

IN THE ELEMENTARY TRAINING DEPARTMENTS OF MISSOURI STATE NORMAL SCHOOLS
AND IN THE EXPERIMENTAL SCHOOL¹ AT THE STATE UNIVERSITY

THE tests employed aimed to measure the work done in reading, writing, arithmetic, spelling, and composition, and were given in May, July, and October, 1916. In order to note the possible effect of giving the tests at different times of the year, the school at Cape Girardeau, which was tested in May, was retested by another examiner in October, with similar results. It may be concluded, therefore, that neither the lapse of the few months' time nor the possibility of opportunities for practice had any appreciable effect. In the tabulation of the results the pupils were listed in the grades in which they were enrolled in May. The testing was done by five graduate students² of the Division of Education of Harvard University under the direction of Walter F. Dearborn, professor of education at that university. Special care was given to the training of the examiners in order that the methods of conducting the tests might be uniform. In the dictation of words for spelling, and in one of the reading tests, the examiners were assisted by selected teachers in the several schools.

The correcting and scoring of all the papers were done by two, and in some instances by three, of the examiners. In those cases where the personal factor might enter into the rating, every paper was scored independently by each of the readers. The penmanship papers were graded by three of the examiners, who practised until they had attained a high degree of uniformity in their judgments. After practice, their final ratings fell within one step in terms of the Ayres scale. Similarly all of the papers in composition were read by two of the examiners who had thru practice acquired an equal proficiency in rating the papers. When there were small differences in the judgments, the average was taken. It is believed that many errors which inevitably appear when the work of correcting is done by teachers and pupils have been eliminated by having a limited number of trained readers for the work. The skill and insight attained by the examiners thru practice is cumulative. The time consumed in correcting is decreased, while the accuracy of the work is increased, and the results are interpreted with greater discernment and uniformity.

All that these tests assume to do is to determine the attainments of the pupils in the schools at the time the tests were given. It is quite possible that in some of the classes the pupils are drawn from an inferior school population. It was stated in one school, for example, that many of the pupils were recruited from a "floating" population. Some of the classes were very small. In such classes it is of course possible to have by mere chance relatively inferior or relatively superior groups. Some indication of the character of these classes has been secured from a study of the age-grade distribution.

¹ The experimental school at Columbia was included among the schools at which tests were given, because the intention at the time was to publish the discussion of the preparation of teachers at the University of Missouri with the present volume, and to include therewith a careful examination of this undertaking. This proved not to be feasible, as explained in the Introduction. It seemed unnecessary, however, on this account to omit the results of the tests at Columbia, inasmuch as to do so would have required a reworking of a large portion of the material in which the Columbia data had been included. It should be noted that this institution is unlike the other schools, in that it is not conducted as a training school for teachers, but for experimental purposes, with special reference to the curriculum. On this basis, the pupils are not led to give their attention to the formal studies which are the subjects of these tests. The results at Columbia should be interpreted, therefore, only in the light of the whole procedure at that school.

² Messrs. H. B. Cummings, L. P. Damon, E. A. Lincoln, C. A. Puckett, and E. A. Shaw.

The results are stated in the tables in terms of the averages or medians, depending generally on the method of presenting standards in the studies with which it is desired to make comparison. It has been found that even for the small number of cases studied in these schools the median, which is secured with comparatively little labor, is in close agreement with the average in nearly all cases. When this was not the case, the median was usually more representative of the group than the average. Several methods of comparing the relative standing of the various schools and grades have been employed. This has been necessary because of the small number of cases involved in most of the comparisons, but also because of other considerations. The average or median standing of the various grades has generally been used for inter-grade comparisons; but, in the inter-school comparisons, since the work of the upper grades is more representative of what the schools have accomplished than that of the lower grades, the standing of the former grades may properly be given greater weight. Since our tests of the eighth grades are sometimes incomplete, the average or median standing of the sixth and seventh grades taken together has been secured for this comparison.¹

The maximum number of pupils tested is shown in Table 59 by schools and grades. Because of absences, the number of papers obtained in any given test was often one or two less than the number appearing in the table. Columbia has no eighth grade, and, as there is no ninth grade at Maryville or Kirksville, no results for the eighth grade could be obtained in the October testing of these schools. For these reasons the results from the eighth grade have not been used in the inter-school comparisons, but are summarized for all the normal schools for the sake of comparisons with standards or other records.

¹ The above method of ranking did not always prove adequate to express all the facts, and in questionable cases several other methods have been used. The supplementary methods employed are the following: (1) *Upper Grade Median Method* - Comparison of standing of pupils in each grade with that of the pupils in the preceding grade, with special reference to the standing of the seventh grade as compared with that of the second or third grade. Obviously, the efficiency of a school can be judged in part by the evidence of superior or inferior accomplishment on the part of the later grades as compared with the earlier grades of the school. It is true that the attainments, e.g., of an exceptional third grade when compared with an inferior eighth might seem to indicate that the school had not accomplished much, and this possibility limits somewhat the usability of the method. The average age of the pupils in such a third grade in comparison with the age of the pupils in the eighth grade may in some instances explain this result. The method has, therefore, always been supplemented by a study of the age-grade relationships. If, for example, the average age of the pupils in the various grades increases uniformly, but the relative attainments of the pupils advance more rapidly, this can usually be taken as evidence of the superior efficiency of training rather than as evidence of the mere maturity of the pupils. Some very striking evidence of the close relationship between age and school attainment will appear in the tables. For the present it is enough to say that the relationship seems so close that, when there is some irregularity in school progress, a reference to the age-grade table will almost invariably explain the difference. The striking instances in this report of the relative superiority of a succeeding grade over a preceding one can in most cases be explained in this way. (2) *Comparison in terms of the sum of the relative ranks of the separate grades*: By this method each of the grades is considered separately. For example, the second grades of all the schools studied are ranked according to their relative standing in a given test. Next, the third and the subsequent grades are handled in the same way. Then the relative standing of the school as a whole is judged by the sum of the first, second, third, etc., ranks secured by the various grades. This method has the advantage of giving weight to the attainments of the earlier grades, and thus it supplements the first two methods which rate the schools chiefly on the basis of the attainments of the later grades. It should be said, however, that it is a fair assumption that relative superiority in the earlier grades is likely to be indicative of the selection of a superior group rather than excellence of school training; but this is not always true. Therefore, altho it is believed that the first two methods outlined above are on the whole better, it has seemed fair to give some weight in judging the school as a whole to the accomplishments of the pupils of the earlier grades. This method of comparison will be spoken of as the Rank-Sum method. (3) At times the best results are obtained by a direct study of the distributions or frequency tables of the results of the tests. These give a record of each individual score, and thus often throw considerable light on the above mentioned problems of comparison.

The tables show two rankings. The first of these is based on the scores of the combined sixth and seventh grades; the second and final ranking will take into consideration all the other methods of comparison above described.

TABLE 59. NUMBER OF PUPILS BY SCHOOLS AND GRADES

<i>Grade</i>	2	3	4	5	6	7	8	<i>Total</i>
KIRKSVILLE	19	16	17	13	25	19	9	118
WARRENSBURG	15	21	15	20	21	41	32	165
CAPE GIRARDEAU	22	9	13	15	13	23	16	111
SPRINGFIELD	16	16	16	12	16	17	14	107
MARYVILLE	6	10	10	16	8	12	10	72
COLUMBIA	<u>12</u>	<u>10</u>	<u>19</u>	<u>11</u>	<u>13</u>	<u>14</u>	<u>0</u>	<u>79</u>
Grade Totals	90	82	90	87	96	126	81	652

A study of the ages is important because of the light thrown on the question of the mental calibre of the classes. Other things being equal, it is likely that a grade composed of older pupils is an inferior grade, and, conversely, a grade composed of younger pupils is likely to be a superior one. For valid comparisons, then, the median ages of the pupils in the grades, schools, or systems compared should be the same. This condition is not fulfilled. The medians of the combined grades progress regularly, and with equal deviations, beginning at 8 years in the second grade, and

TABLE 60. MEDIAN AGES OF PUPILS BY GRADES

<i>Grade</i>	2	3	4	5	6	7	8
KIRKSVILLE	8 ¹ 19 (1)	9 16 (1)	10 17 (1)	12 13 (1)	12 25 (0)	13 19 (0)	14 9 (1)
WARRENSBURG	8 15 (0)	9 21 (1)	9 15 (1)	11 20 (1)	11 21 (1)	13 11 (1)	14 31 (1)
CAPE GIRARDEAU	8 22 (0)	9 9 (0)	10 13 (1)	11 15 (1)	12 13 (1)	12 23 (1)	14 16 (1)
SPRINGFIELD	7 16 (0)	8 16 (0)	9 15 (1)	10 12 (0)	11 16 (0)	13 14 (0)	15 14 (1)
MARYVILLE	8 6 (1)	9 10 (1)	10 10 (1)	12 16 (1)	12 8 (1)	14 12 (1)	15 10 (1)
COLUMBIA	8 12 (0)	9 10 (1)	10 19 (0)	11 11 (1)	12 13 (1)	13 14 (1)	—
Grade Medians	8 90 (1)	9 82 (1)	10 89 (1)	11 87 (1)	12 96 (1)	13 123 (1)	14 80 (1)

reaching 14 in the eighth. But in the separate schools this regularity is found only in Columbia. The age problem may be handled in another way by studying the retardation and acceleration of individuals in each grade. Tables 61 and 62 show the findings on this basis. A pupil was considered retarded if he was two or more years older than the group median age for his grade. He was considered accelerated if he was two years younger than the grade median. In Kirksville, Maryville, and Warrens-

TABLE 61. NUMBER AND PER CENT OF PUPILS TWO OR MORE YEARS RETARDED

<i>Grade</i>	2	3	4	5	6	7	8	<i>All Grades</i>
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %
KIRKSVILLE	4 21	1 6	4 24	3 23	6 24	1 5	2 22	21 19
WARRENSBURG	0	2 10	1 7	5 25	5 24	6 14	4 13	23 14
CAPE GIRARDEAU	0	0	0	3 20	3 23	1 4	3 19	10 9
SPRINGFIELD	0	0	0	0	0	0	1 7	1 7
MARYVILLE	2 33	1 16	3 30	3 19	1 6	3 25	3 30	15 21
COLUMBIA	0	0	1 5	0	3 23	0	—	4 5

burg there is a fairly large amount of retardation throughout the grades. The first two schools have retarded pupils in every grade, the latter in every grade but one. In Cape Girardeau the retardation comes in the last four grades. In both Springfield

¹ The first figure is the median age of the grade group; the figure in italics to the right indicates the number of children in the grade; and the figure below in parenthesis gives the median deviation from the grade median.

and Columbia the retardation is negligible except in one grade. It is apparent that, except in the case of Warrensburg, acceleration in these schools is not nearly so frequent as retardation. Such as occurs is concentrated for the most part in one or two grades.

TABLE 62. NUMBER AND PER CENT OF PUPILS TWO OR MORE YEARS ACCELERATED

Grade	2	3	4	5	6	7	8	All Grades
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %
KIRKSVILLE	0	0	1 6	1 8	2 8	0	0	4 4
WARRENSBURG	0	2 10	1 7	0	9 43	5 12	2 7	19 12
CAPE GIRARDEAU	0	0	1 8	1 7	1 8	4 17	2 12	9 8
SPRINGFIELD	1 6	1 6	1 6	1 9	0	1 7	0	5 5
MARYVILLE	0	0	0	1 6	0	2 16	0	3 4
COLUMBIA	0	0	0	0	0	1 7	—	1 1

To conclude: The study of the ages of pupils points out probable differences in the mental make-up of the pupils in the different schools, and of pupils of the different grades in the same school, which must be kept in mind when the results from the various schools are compared.

1. *Arithmetic Tests*

Two series of tests were given in arithmetic: first, the Courtis Tests (Series B),¹ and second, the Stone Reasoning Tests. The findings in the four fundamental processes of addition, subtraction, multiplication, and division are stated separately, and a rank in all four of the processes combined has been attempted. It will be seen from the table that the correlation between the standings in the different tests is not a perfect one. There is, however, a decided tendency for a school to hold approximately the same rank throughout the tests in both speed and accuracy, and for this reason the final ranking is probably valid. A further ranking may be made by combining the standings in speed and accuracy. In this Cape Girardeau stands first. Springfield and Maryville seem practically tied for the second place, but the higher rank should probably go to the former school on the basis of greater accuracy in the work. Warrensburg, Columbia, and Kirksville follow in the order named.

TABLE 63. SPEED OF ADDITION

Grade	3	4	5	6	7	8	6 and 7 combined Score Rank	Final Rank ³
KIRKSVILLE	4	4	5	6	6	—	6	5.5
WARRENSBURG	3	5	6	6	8	—	7	3
CAPE GIRARDEAU	3	4	6	8	8	—	1	1
SPRINGFIELD	2	4	6	6	6	—	6	5.5
MARYVILLE	5	6	6	7	8	—	7	2.5
COLUMBIA	2	3	5	7	6	—	6	5
All Schools	3	4	6	6	7	8	6	
Courtis Standards		7	9	10	11	12		
Small Cities ²		7	8	9	10	10		

¹ The Courtis Tests (Series B) consist of a set of twenty-four examples for each of the operations in arithmetic: addition, subtraction, multiplication, and division. There is a definite time allotment for each set. In giving the test each child is provided with a folder containing the four sets of examples, and is carefully instructed as to what he is to do. At a signal from the tester, all the children begin work on the first set of examples, and they continue until time is called. The same method of procedure is used for each set in turn. Between the second and third sets a short rest period is given the children. The results are shown in terms of "Speed" and "Accuracy" in accordance with the more recent tables of Courtis, the former being the actual number of examples attempted within the required time, and the latter the percentage of the number of attempts that were done correctly.

² Courtis's General Tabulation, Small Cities, June, 1916.

³ It seems unnecessary in connection with each of the following tests to review all of the considerations by which the final rank of the schools was determined. As an illustration of the process, however, the procedure in the pres-

TABLE 64. ACCURACY OF ADDITION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined <i>Score</i>	<i>Rank</i>	<i>Final Rank</i>
	%	%	%	%	%	%	%		
KIRKSVILLE	0	25	20	38	50	—	40	5	6
WARRENSBURG	0	25	38	33	50	—	44	3	3
CAPE GIRARDEAU	0	20	43	60	67	—	63	1	1
SPRINGFIELD	0	25	50	50	64	—	56	2	2
MARYVILLE	25	67	50	60	40	—	40 ¹	5	5
COLUMBIA	0	0	50	33	60	—	40	5	4
All Schools	0	20	40	44	50	50	50		
Courtis Standards		64	70	73	75	76			
Small Cities		60	68	71	72	74			

TABLE 65. SPEED OF SUBTRACTION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined <i>Score</i>	<i>Rank</i>	<i>Final Rank</i>
KIRKSVILLE	1	4	6	5	6	—	5	6	6
WARRENSBURG	3	4	7	5	9	—	7	4.5	4
CAPE GIRARDEAU	3	4	8	8	8	—	8	2.5	2.5
SPRINGFIELD	4	4	7	8	8	—	8	2.5	2.5
MARYVILLE	2	5	6	9	9	—	9	1	1
COLUMBIA	1	1	4	6	7	—	7	4.5	5
All Schools	2	4	6	6	8	10	7		
Courtis Standards		7	9	10	12	13			
Small Cities		7	9	10	11	12			

TABLE 66. ACCURACY OF SUBTRACTION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined <i>Score</i>	<i>Rank</i>	<i>Final Rank</i>
	%	%	%	%	%	%	%		
KIRKSVILLE	0	0	33	40	60	—	40	6	6
WARRENSBURG	0	40	60	67	78	—	77	2	2
CAPE GIRARDEAU	0	50	63	55	70	—	63	4.5	4
SPRINGFIELD	25	20	71	75	67	—	70	3	3
MARYVILLE	0	80	60	55	67	—	63	4.5	5
COLUMBIA	0	0	50	43	86	—	83	1	1
All Schools	0	20	60	57	75	67	67		
Courtis Standards		80	83	85	86	87			
Small Cities		76	82	84	85	85			

ent case is given in full. As may be seen from the table, Cape Girardeau leads with 8 examples attempted. Maryville and Warrensburg are tied with 7 attempts each. The variability of the Warrensburg median is, however, twice as great as that of Maryville, and since the latter school ranks decidedly superior to Warrensburg by the Rank-Sum method of comparison, it seems that Maryville should have the second place. In the table, Columbia, Kirksville, and Springfield all rank the same, each having 6 attempts as a median in the combined sixth and seventh grades. From an examination of the distributions it appears that Columbia should be ranked slightly ahead of the other two. The results in Springfield are striking in that there is no progress after the fifth grade. This suggests the possibility of an inferior seventh grade,—a possibility which has already been indicated by the study of the age-grade distributions. This school also has a smaller variability than Kirksville, but on the other hand, the Rank-Sum method shows that they are not materially different. With all the above considerations in mind it seems that the ranking by the upper grade medians should be modified slightly, and that the final ranking should be as follows: (1) Cape Girardeau; (2) Maryville; (3) Warrensburg; (4) Columbia; (5) Springfield and Kirksville.

¹ The inconsistency of this median is only apparent. Whenever one of the two grades used was much larger than the other, a random selection was made from it, in order that all the combined grade medians might be based on approximately the same number of cases. This method of random selections sometimes gave averages and medians which do not seem to agree with the central tendencies of the separate grades. The method cannot, however, be considered defective on this account, for there are many inconsistencies quite as great where no selection was used, and furthermore the variations run so high that a difference of several points in the central tendency is quite insignificant. These seeming inconsistencies occur in nearly all of the tables.

TABLE 67. SPEED OF MULTIPLICATION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined		<i>Final</i>
							<i>Score</i>	<i>Rank</i>	<i>Rank</i>
KIRKSVILLE	0	1	3	3	6	-	4	5.5	5
WARRENSBURG	0	3	6	5	7	-	6	3.5	3.5
CAPE GIRARDEAU	0	3	5	8	7	-	8	1.5	2
SPRINGFIELD	0	3	5	8	6	-	6	3.5	3.5
MARYVILLE	3	5	5	7	8	-	8	1.5	1
COLUMBIA	0	1	1	3	4	-	4	5.5	6
All Schools	0	2	5	5	6	9	6		
Courtis Standards		6	8	9	10	12			
Small Cities		6	8	9	10	11			

TABLE 68. ACCURACY OF MULTIPLICATION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined		<i>Final</i>
	%	%	%	%	%	%	<i>Score</i>	<i>Rank</i>	<i>Rank</i>
KIRKSVILLE	0	0	25	0	33	-	20	6	6
WARRENSBURG	0	0	50	50	60	-	50	3.5	3.5
CAPE GIRARDEAU	0	0	67	63	75	-	67	1	1
SPRINGFIELD	0	0	80	67	57	-	60	2	2
MARYVILLE	0	25	75	50	50	-	50	3.5	3.5
COLUMBIA	0	0	0	0	57	-	33	5	5
All Schools	0	0	50	50	50	70	50		
Courtis Standards		67	75	78	80	81			
Small Cities		68	76	79	80	81			

TABLE 69. SPEED OF DIVISION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined		<i>Final</i>
							<i>Score</i>	<i>Rank</i>	<i>Rank</i>
KIRKSVILLE	0	1	2	3	4	-	3	5.5	6
WARRENSBURG	0	2	5	4	6	-	5	3.5	3
CAPE GIRARDEAU	0	1	4	5	5	-	5	3.5	4
SPRINGFIELD	0	2	3	6	5	-	6	1.5	2
MARYVILLE	0	3	4	5	6	-	6	1.5	1
COLUMBIA	0	0	1	2	5	-	3	5.5	5
All Schools	0	1	4	4	5	8	4		
Courtis Standards		5	6	8	10	11			
Small Cities		5	6	8	10	10			

TABLE 70. ACCURACY OF DIVISION

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined		<i>Final</i>
	%	%	%	%	%	%	<i>Score</i>	<i>Rank</i>	<i>Rank</i>
KIRKSVILLE	0	0	0	33	50	-	33	6	6
WARRENSBURG	0	0	60	67	80	-	80	2	2
CAPE GIRARDEAU	0	0	33	75	80	-	86 ¹	1	1
SPRINGFIELD	0	0	67	71	75	-	71	3	3
MARYVILLE	0	60	57	50	60	-	50	4.5	4
COLUMBIA	0	0	0	50	60	-	50	4.5	5
All Schools	0	0	50	57	71	75	67		
Courtis Standards		57	77	87	90	91			
Small Cities		59	77	87	91	93			

¹ See page 447, note 1.

TABLE 71. COMPARISON OF RANKS IN COURTIS TESTS¹

<i>School</i>	<i>Addition</i>		<i>Subtraction</i>		<i>Multiplication</i>		<i>Division</i>		<i>Four Operations Combined</i>	
	<i>S</i> ²	<i>A</i> ²	<i>S</i>	<i>A</i>	<i>S</i>	<i>A</i>	<i>S</i>	<i>A</i>	<i>S</i>	<i>A</i>
KIRKSVILLE	5.5	6	6	6	5	6	6	6	6	6
WARRENSBURG	3	3	4	2	3.5	3.5	3	2	4	3
CAPE GIRARDEAU	1	1	2.5	4	2	1	4	1	2	1
SPRINGFIELD	5.5	2	2.5	3	3.5	2	2	3	3	2
MARYVILLE	2	5	1	5	1	3.5	1	4	1	4
COLUMBIA	4	4	5	1	6	5	5	5	4.5	5

TABLE 72. MEDIAN SCORES IN STONE REASONING TEST³

<i>Grade</i>	3	4	5	6	7	8	6 and 7 combined <i>Score</i>	<i>Rank</i>	<i>Final Rank</i>
KIRKSVILLE	0.0	1.0	1.0	4.0	5.2	-	5.0	4.5	5.5
WARRENSBURG	0.0	1.0	2.0	3.6	5.6	-	4.4	6	5.5
CAPE GIRARDEAU	1.0	2.0	3.0	5.0	7.1	-	6.6	1	1
SPRINGFIELD	1.0	2.0	3.6	4.6	6.8	-	5.8	2	2
MARYVILLE	0.0	0.5	3.1	4.0	6.7	-	5.4	3	3
COLUMBIA	1.0	2.5	4.6	4.6	5.0	-	5.0	4.5	4
All Schools	1.0	1.6	3.0	4.0	6.4	7.0	5.2		
Starch Standards ⁴	4.5	6.2	7.8	9.4	11.0	12.6			
Three Cities ⁵			3.1	5.0	7.3	8.9			
Boston				4.4	5.6	7.6			

2. Spelling Tests

For these tests thirty words were selected for each grade. Twenty of these were taken from the Ayres Spelling Scale, and the other ten from the Boston Minimum Lists.⁶

TABLE 73. SPELLING OF WORDS FROM THE AYRES LIST

<i>Grade</i>	2	3	4	5	6	7	8	6 and 7 combined <i>Score</i>	<i>Rank</i>	<i>Final Rank</i>
KIRKSVILLE	67	66	53	73	64	58	-	61	6	6
WARRENSBURG	82	65	58	76	79	71	-	74	4	4
CAPE GIRARDEAU	76	84	82	85	80	83	-	80	1.5	2
SPRINGFIELD	95	85	72	89	81	79	-	80	1.5	1
MARYVILLE	97	93	73	80	76	76	-	75 ⁷	3	3
COLUMBIA	Not given	60	57	66	67	76	-	72	5	5
All Schools	81	74	64	78	74	73	77	76 ⁷		
Ayres Standard ⁸	77	77	76	76	76	76	76			

¹ For graphic comparisons of the median scores in Missouri training schools with Courtis standards, see Table 84.

² S=Speed. A=Accuracy.

³ In this test the pupils are given a folder which contains twelve problems of graded difficulty. Exactly fifteen minutes are allowed the pupils in which to work as many problems as they can. A certain problem value, as determined by the author of the tests, is credited for each correct answer. The pupil's score in the test is obtained by adding all the credits which he receives.

⁴ Based on results from 2515 pupils in 18 schools.

⁵ The average of the medians secured at Butte, Montana; Laporte, Indiana; and Salt Lake City, Utah.

⁶ The words were not given by the examiners, but were dictated by the regular grade or practice teacher. This was deemed advisable because of the fact that the pupils were more familiar with the voice and enunciation of the teacher. In correcting the papers credit was given for accepted forms of simplified spelling, and for wrong words, evidently misunderstood, which were correctly spelled. It should be noted in this test that progress thru the grades is not made by getting a higher score on the same words, but by maintaining the same score (79) on lists of words of increasing difficulty. The comparisons are made in terms of averages instead of medians because the standards are so stated.

⁷ See page 447, note 1.

⁸ Average of 84 cities.

TABLE 74. SPELLING OF WORDS FROM THE BOSTON LIST¹

Grade	2	3	4	5	6	7	8	6 and 7 combined Score	Rank	Final Rank
KIRKSVILLE	36	33	29	59	39	33	-	33	6	6
WARRENSBURG	59	47	31	65	60	43	-	52	3	3
CAPE GIRARDEAU	57	65	66	57	55	62	-	63 ^a	1	2
SPRINGFIELD	73	61	71	71	74	50	-	62	2	1
MARYVILLE	73	59	38	57	59	37	-	42	5	4
COLUMBIA	Not given	38	28	35	53	36	-	44	4	5
All Schools	57	50	42	58	55	45	57	49		
Brookline, Mass. ³			61	69	84	66	80			

3. Penmanship Tests

The tests in penmanship were arranged by Professor Henry W. Holmes of Harvard University, and were used with his permission. Records for comparison with the present results were made available thru his courtesy.

The ranking of the different schools is practically the same in both tests given. For efficiency in writing a proper balance must evidently be maintained between speed and quality; that is, neither speed nor quality of writing can be bettered at the expense of the other. By taking both factors into consideration, the Warrensburg school stands first in the ranking. It has the best writing from the standpoint of quality combined with fair speed. Cape Girardeau and Columbia come next, and Springfield, Maryville, and Kirksville follow in the order named.

TABLE 75. SPEED OF HANDWRITING⁴

Grade	2	3	4	5	6	7	8	6 and 7 combined Score	Rank	Final Rank
KIRKSVILLE	31	39	59	69	83	71	-	79	6	6
WARRENSBURG	45	44	60	79	82	92	-	87	4	3.5
CAPE GIRARDEAU	38	66	75	100	112	111	-	111	1	1
SPRINGFIELD	44	69	75	97	110	96	-	104	2	2
MARYVILLE	39	54	51	55	83	89	-	83	5	5
COLUMBIA	35	32	51	87	89	92	-	89	3	3.5
All Schools	40	49	62	80	92	92	102	93 ²		
St. Louis ⁵	37	57	64	66	69	75	73			
Newton, Mass.	39	55	59	73	85	94	102			
Brookline, Mass. (1236 pupils)				76	87	90	98			

¹ The relative standings of the schools in the spelling of words from the Boston list is shown in the above table. The reason for the lower scores on the Boston list is that the words are much more difficult than those of the Ayres list.

² See page 447, note 1.

³ Boston standards for these words range from 86 per cent to 95 per cent, but only after the words have been studied for one or two lessons. The conditions in Brookline, Mass., were the same as in Missouri.

⁴ The Holmes Test for the Speed of Writing is given as follows: A short sentence is written on the board by the examiner and copied by the children at the top of their papers. After the directions for the test have been given, the sentence is read in concert by the class several times, so that it is fairly well learned before the test begins, and little or no time is lost by the pupils because of forgotten copy. After two short practice periods of 15 seconds each, which are given for the purpose of "warming up," the sentence is written repeatedly for a one minute and a four minute period. The number of letters written per minute in each period is found, and the average of these is taken as the pupils' speed of writing.

The sentence is: "Jolly kings bring gifts while happy maids dance." It will be noticed that this sentence contains most of the letters and the common letter combinations.

⁵ The Holmes material was not used in this test.

TABLE 76. QUALITY OF HANDWRITING¹

Grade	2	3	4	5	6	7	8	6 and 7 combined Score	Rank	Final Rank
KIRKSVILLE	35	32	39	36	38	35	-	37	6	6
WARRENSBURG	35	39	43	48	47	51	-	51	1	1
CAPE GIRARDEAU	33	36	43	39	42	47	-	42	4	3
SPRINGFIELD	34	29	33	36	43	40	-	41	5	4.5
MARYVILLE	32	41	38	43	45	37	-	44	3	4.5
COLUMBIA	50	42	46	43	44	49	-	47	2	2
All Schools	35	36	39	41	42	45	47	44		
Kansas City ²	30	36	42	50	54	56				
St. Louis ²	30	32	37	49	57	63	74			
Newton, Mass.	54	50	45	48	51	50	53			
Starch Standards ²	27	33	37	43	47	53	57			
South Bend Standards ²		40	40	50	50	60	60			

4. Reading Tests

The reading tests were four in number: the Kansas Silent Reading Test and Professor Holmes's three tests (*a*) for speed in silent reading, (*b*) in reproducing a passage read, and (*c*) in answering questions on a passage read.

TABLE 77. KANSAS SILENT READING TESTS³

Grade	3	4	5	6	7	8	6 and 7 combined Score	Rank	Final Rank
KIRKSVILLE	5.2	9.8	12.8	16.8	19.3	-	18.4	2	2
WARRENSBURG	10.3	10.3	12.5	12.9	20.1	-	16.7	3	3
CAPE GIRARDEAU	18.1	16.3	23.8	10.6	30.0	-	19.7	1	1
SPRINGFIELD	10.5	13.4	18.3	13.5	17.3	-	13.9	5	5
MARYVILLE	7.2	8.5	14.6	11.7	15.8	-	12.8	6	6
COLUMBIA	6.8	12.4	16.3	15.4	16.3	-	15.4	4	4
All Schools	8.5	12.4	16.3	13.2	20.0	18.4	16.2		
Scores in 19 Cities ⁴	6.0	9.9	13.7	13.4	16.5	18.8			
Western States	6.1	10.6	14.4	15.0	18.0	20.6			

¹ The Holmes Test for the Quality of Writing provides for the rating on the Ayres Scale of three samples of the pupils' penmanship. The average of these three ratings is taken as the final score.

The first of the three samples rated was the paper written in the four minute speed test; the second, a short story written by the pupils from dictation, and the third the "reproduction" paper from the reading test. In the latter case the pupils did not know that the paper was to be graded for penmanship. Each of the papers was rated independently by two of the examiners, and the two ratings were averaged for the score of the paper.

² The test given in this case was not the Holmes test, but the writing was rated on the Ayres Scale.

³ The purpose of this test is to determine "the ability of pupils to get meaning from the printed page." It consists of a series of "exercises," in the form of short paragraphs, in which the child is given certain directions to follow or in which he is required to solve a simple problem. Each exercise is so arranged that the response of the child is either right or wrong. A folder containing a set of these exercises is given to each child in the class, and all begin to work at a signal from the examiner. The score is determined by the number of exercises which are completed in five minutes, the weighting of each exercise in the final score having been calculated by the author of the tests. The median scores obtained are recorded in the table. The slight decrease in the scores of the sixth grade is due to the fact that two sets of exercises are used, one set for the third, fourth, and fifth, and another for the sixth, seventh, and eighth grades.

⁴ For 7729 pupils.

TABLE 78. SPEED OF SILENT READING¹

<i>Grade</i>	2	3	4	5	6	7	8	6 and 7 combined <i>Score Rank</i>	<i>Final Rank</i>
KIRKSVILLE	126	207	180	321	264	276	—	264 5	5
WARRENSBURG	141	180	147	299	249	309	—	276 4	4
CAPE GIRARDEAU	147	384	237	222	234	463	—	321 2	2
SPRINGFIELD	138	237	188	364	276	237	—	249 6	6
MARYVILLE	180	180	405	363	363	291	—	309 3	3
COLUMBIA	186	147	219	309	327	324	—	324 1	1
All Schools	147	198	198	309	276	318	363		
Brookline, Mass. (1251 pupils)				249	283	309	294		

TABLE 79. REPRODUCTION OF PASSAGE READ

<i>Grade</i>	2	3	4	5	6	7	8	6 and 7 combined <i>Score Rank</i>	<i>Final Rank</i>
KIRKSVILLE	11	43	40	51	60	63	—	63 2	2
WARRENSBURG	14	29	43	51	51	57	—	54 5	5
CAPE GIRARDEAU	14	66	60	63	63	69	—	69 1	1
SPRINGFIELD	26	49	54	49	57	54	—	57 3.5	3.5
MARYVILLE	41	29	43	51	57	57	—	57 3.5	3.5
COLUMBIA	29	37	29	57	49	57	—	49 6	6
All Schools	20	37	43	51	54	60	60	57	
Brookline, Mass. (1224 pupils)				57	57	57	60		

TABLE 80. ANSWERS TO QUESTIONS ON PASSAGE READ

<i>Grade</i>	2	3	4	5	6	7	8	6 and 7 combined <i>Score Rank</i>	<i>Final Rank</i>
KIRKSVILLE	19	39	49	64	69	68	—	69 5	5.5
WARRENSBURG	19	44	44	72	68	68	—	68 6	5.5
CAPE GIRARDEAU	39	71	77	73	77	85	—	82 1	1
SPRINGFIELD	38	59	68	77	78	77	—	77 2	2
MARYVILLE	44	49	54	69	72	69	—	72 3	3.5
COLUMBIA	53	53	44	68	70	73	—	70 4	3.5
All Schools	37	50	52	69	72	72	75	73 ²	
Brookline, Mass. (1252 pupils)				62	64	68	73		

5. Composition Test

For this test the pupils of the seventh and eighth grades were asked to write a composition on any one of three assigned subjects. The topics given were such that the pupil had a fairly wide range of choice, while the product was kept fairly uniform. The compositions were graded by the Harvard-Newton Composition Scale.

¹ For this and the two following tests the pupils are given slips of paper on which is printed a simple story, and a period of twenty seconds is allowed for reading. When the signal to stop is given, each child makes a mark under the word which he is reading, and then finishes the reading of the story. When all are done, the class is asked to reproduce the story in writing. Finally, a set of questions on the main points of the story is given, and the pupils are asked to write the answers. The speed of silent reading is scored in the number of words read per minute; the reproduction is scored according to the number of ideas which are correctly reproduced by the pupil, and the answers to the questions according to definite values assigned them. The grade scores are the averages of the individual scores. Before giving this test a similar test was first practised to familiarize the children with the mechanics of the operation.

² See page 447, note 1.

TABLE 81. COMPOSITIONS

<i>School</i>	<i>Grade 7</i>	<i>Grade 8</i>	<i>Final Rank</i> ¹
KIRKSVILLE	64	72	4 5
WARRENSBURG	57	65	6
CAPE GIRARDEAU	74	75	1
SPRINGFIELD	75	75	2
MARYVILLE	67	69	4.5
COLUMBIA	70	-	3
All Schools	67	70	
Bloomington, Ind. ² (268 pupils)	61	67	

6. Final Ranking of the Schools

By way of summarizing the inter-school comparisons, a final ranking of the schools on the basis of the results in all the tests has been made. The tables show that Cape Girardeau easily ranks first. This school stands either first or second in all but three of the tests. Springfield stands second, while Maryville and Warrensburg are about tied for third place, with the advantage slightly in favor of the former. Columbia comes fifth, and Kirksville last—considerably below the other schools.

The relative standing of the schools is not, however, the most significant thing that the results of the tests show. Of much greater importance is the fact of the wide variation between these schools. Altho in practically every test there are two or more schools in which the attainments are very close, yet in every test the difference between the highest and the lowest score is considerable. It does not seem that such variations should exist between schools which are engaged in similar work. Since it is unlikely that the selection of pupils or their general intelligence is sufficiently different in the various schools to produce such results, the explanation must be looked for in differences in the quality and amount of school training.

TABLE 82. SUMMARY OF RANKS GIVEN EACH SCHOOL

Arithmetic Tests									Spelling		Penman-ship		Reading and Composition					Total of Ranks	Final Standing	
	Addition—Speed	Addition—Accuracy	Subtraction—Speed	Subtraction—Accuracy	Multiplication—Speed	Multiplication—Accuracy	Division—Speed	Division—Accuracy	Stone Test	Ayres List	Boston List	Speed	Quality	Kansas	Speed	Reproduction	Questions			Compositions
KIRKSVILLE	5.5	6	6	6	5	6	6	6	5.5	6	6	6	6	2	5	2	5.5	4.5	95	6
WARRENSBURG	3	3	4	2	3.5	3.5	3	2	5.5	4	3	3.5	1	3	4	5	5.5	6	64.5	4
CAPE GIRARDEAU	1	1	2.5	4	2	1	4	1	1	2	2	1	3	1	2	1	1	1	31.5	1
SPRINGFIELD	5.5	2	2.5	3	3.5	2	2	3	2	1	1	2	4.5	5	6	3.5	2	2	52.5	2
MARYVILLE	2	5	1	5	1	3.5	1	4	3	3	4	5	4.5	6	3	3.5	3.5	4.5	62.5	3
COLUMBIA	4	4	5	1	6	5	5	5	4	5	5	3.5	2	4	1	6	3.5	3	72	5

¹ The comparisons in this test are based on the scores of the seventh grades alone because there is no eighth grade in Columbia, and the scores for the eighth grades at Kirksville and Maryville are based on so few cases as to be unreliable.

² These medians were found by combining the scores of the A and B divisions of the grades in Bloomington. See *Report of Second Indiana Conference on Educational Measurements*, page 117 ff.

7. *Progress in the Schools*

The efficiency of a school may be judged, in part, at least, by the advance in the various subjects which the pupils of the school make from grade to grade. This was one of the methods used above to estimate the rank of a school. It should always be kept in mind, however, that the progress shown below is not that of the same pupils, but that of the school as a whole. The records simply tell how much superior the standing of the pupils in one grade is to that of the pupils in some preceding grade in the same school, and this line of progress in any one school may be easily disturbed if any grade be above or below its normal standard. In the schools as a group such irregularities are likely to be smoothed out. This uniformity in the progress from grade to grade is an important element in the comparison. There may be a regular advance in each grade, or all the gains may be made in one or two grades with little or no gain in the other grades. Grading of pupils and the outlining of courses of study is done, for the most part, in the belief that regular and uniform progress is the rule. It was not considered necessary to make diagrams for all the tests; the seven given in Table 83 indicate clearly the general situation.

The progress lines for all the schools taken together are shown at the right of the diagram. They indicate, for the most part, a steady and gradual gain in the average attainments of the pupils from the second to the eighth grade. In many cases the lines do not rise as rapidly after the sixth grade as they do before this grade. This is what we should expect, because intensive drill in the formal subjects is about finished by the end of the sixth grade. There is one noticeable exception to the general regularity of improvement. In several of the tests the scores of the fifth grade are as high or higher than the scores of the sixth grade. This is especially noticeable in the speed of silent reading, and in the speed of addition. There is a slight improvement in the accuracy of addition.

The progress lines in the several schools again bring out the fact that there are many inter-school differences, as well as inequalities in the same school and grade in the standing of the pupils in the various subjects of study. Altho there are many cases of regular and continued progress thru the grades, the ups and downs in the records show altogether too frequently that grade standards are lacking. Some of the irregularities are doubtless to be explained by the limitation already mentioned, namely, that the progress has not been measured by the attainments of the same groups of pupils in successive years; but the fact still remains that, in many instances, grade position gives little or no indication of the character of work or the attainments of the pupils.

8. *Correlations*

A few of the possible correlations among the abilities measured in the tests have been worked out, and are given in Table 85:¹

¹ Most of these correlations were calculated by the Spearman "foot-rule" formula and were then translated into the equivalent coefficients of correlation of the Pearson method. (See Table 37, page 169, of Thorndike's *Mental and Social Measurements*.) Since there is some question concerning the reliability of this method of calculation, a number of the correlations were also obtained by the usual Pearson formula as a check on the results. The results by the two methods were in sufficient agreement to justify the use of the shorter method alone in the remaining correlations.

TABLE 83. PROGRESS OF TRAINING SCHOOLS FROM GRADE TO GRADE IN CERTAIN SELECTED ABILITIES

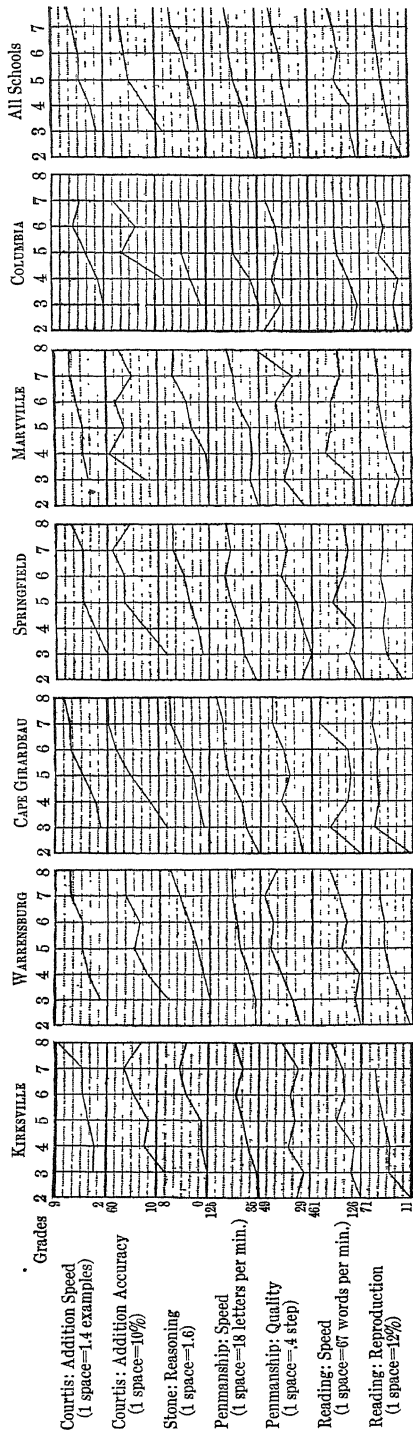
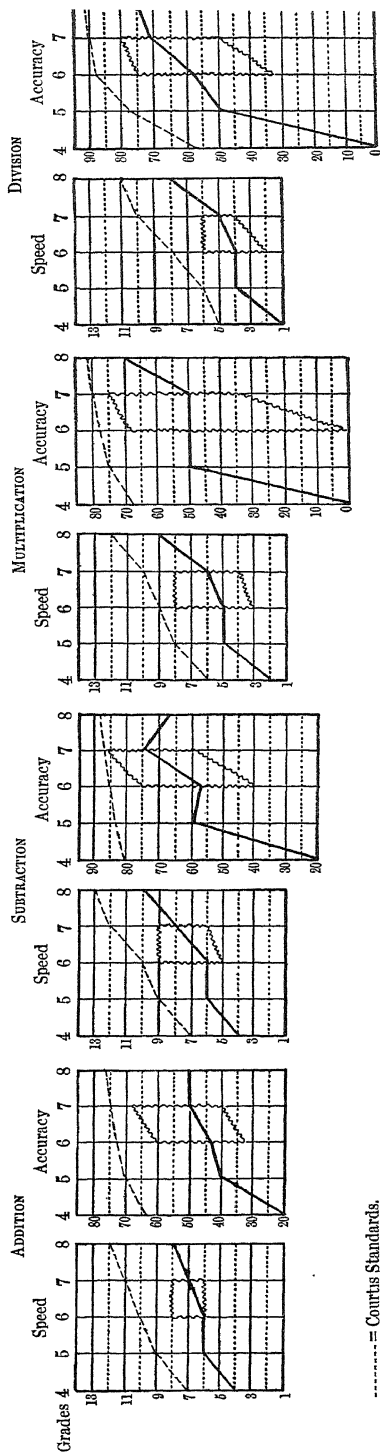


TABLE 84. JOINT PERFORMANCE OF TRAINING SCHOOLS IN COURTIS TESTS WITH EXTREME VARIATIONS IN GRADES SIX AND SEVEN



----- = Courtis Standards.
 ————— = Missouri Training Schools.
 ~~~~~ = Extreme Variation, Grades 6 and 7.

TABLE 85. CORRELATIONS BETWEEN CERTAIN ABILITIES MEASURED IN THE TESTS

|                | I<br>Speed and Quality of<br>Writing |     |       | II<br>Quality of Writing in<br>Speed Test and Quality of<br>Writing in Reproduction<br>Test |     |       | III<br>Speed of Silent Reading<br>and Quality of Reproduc-<br>tion of Passage Read |     |       | IV<br>Quality of Reproduction<br>and Answers to Questions<br>in the Holmes Reading<br>Test |     |       | V<br>Reproduction of a Passage<br>Read to the Pupils and a<br>Passage Read by Them |     |       |
|----------------|--------------------------------------|-----|-------|---------------------------------------------------------------------------------------------|-----|-------|------------------------------------------------------------------------------------|-----|-------|--------------------------------------------------------------------------------------------|-----|-------|------------------------------------------------------------------------------------|-----|-------|
|                | No. of<br>Cases                      | r   | P. E. | No. of<br>Cases                                                                             | r   | P. E. | No. of<br>Cases                                                                    | r   | P. E. | No. of<br>Cases                                                                            | r   | P. E. | No. of<br>Cases                                                                    | r   | P. E. |
| KIRKSVILLE     | 97                                   | .48 | .05   | 92                                                                                          | .63 | .04   | 84                                                                                 | .52 | .05   | 82                                                                                         | .77 | .03   | 31                                                                                 | .59 | .08   |
| WARRENSBURG    | 161                                  | .36 | .05   | 164                                                                                         | .69 | .03   | 169                                                                                | .44 | .04   | 168                                                                                        | .68 | .03   | 157                                                                                | .56 | .03   |
| CAPE GIRARDEAU | 107                                  | .60 | .04   | 104                                                                                         | .63 | .04   | 104                                                                                | .35 | .06   | 106                                                                                        | .70 | .03   | 100                                                                                | .75 | .03   |
| SPRINGFIELD    | 99                                   | .44 | .05   | 98                                                                                          | .78 | .03   | 100                                                                                | .23 | .06   | 102                                                                                        | .48 | .01   | 96                                                                                 | .58 | .05   |
| MARYVILLE      | 72                                   | .26 | .07   | 72                                                                                          | .70 | .04   | 71                                                                                 | .22 | .07   | 70                                                                                         | .55 | .05   | 69                                                                                 | .63 | .06   |
| COLUMBIA       | 74                                   | .12 | .07   | 73                                                                                          | .73 | .03   | 75                                                                                 | .37 | .07   | 75                                                                                         | .76 | .03   | 72                                                                                 | .80 | .03   |
| All Schools    | 610                                  | .49 | .02   | 603                                                                                         | .72 | .01   | 593                                                                                | .39 | .02   | 593                                                                                        | .70 | .01   | 525                                                                                | .64 | .01   |

### I. Relation of Speed to Quality of Writing

The low correlation between the speed and the quality of writing would seem to indicate a lack in the coordinate development of these two phases of penmanship.

### II. Quality of Writing in Two Different Tests

In one of these tests the pupils knew that their penmanship was being tested and would be graded; in the other, the reproduction test, they did not suspect that the quality of writing would be especially considered. The degree of correlation, as shown in the above table, may, therefore, indicate the extent to which the instruction in penmanship has "carried over" to the ordinary school work of the pupils. The inter-school differences are, in this case, unimportant.

### III. Speed of Silent Reading and Quality of Reproduction

The correlations between the speed of reading and the ability to reproduce accurately what is read do not altogether bear out the statement commonly made that the fast readers also retain or reproduce best what they have read. Most of the studies bearing on the matter have been made on adults, and the question has not been sufficiently studied in the case of children. The differences found may well be in part the result of differences in the methods of school training.

### IV. Quality of Reproduction in Different Tests

The correlation studied in the above table is one in which a very high coefficient is to be expected, for the two tests are evidently similar in character. The chief difference is that the questions cover the main points of the story, while the reproduction calls for all the details that can be remembered. The correlations are lowest in Maryville and Springfield. These are the same schools in which there was little relation between the speed of reading and the quality of reproduction.

### V. "Auditory" and "Visual" Reproduction

The passage read to the pupils was very similar in form to the passage read by them. It was a short story, based upon thirty-five ideas, which was read to each class by the teacher or her assistant. After it had been read thru once, the pupils were asked to write what they could remember of the story in exactly the same way as was done in the case of the corresponding passage which they had read for themselves. As may be seen in the above table, there is a fair amount of correlation in the standings of pupils in the two tests. The majority of those who do well in one test do well in the other. School training may have a very considerable effect on the result, and it is, therefore, worthy of note, in view of the different methods of training practised at Columbia, that the highest correlation is found in that school.

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